BIRDSEYE

Discusses Problems of Quick-Freezing

(Concluded from Page 4, Column 5)

the cell structure in freezing is unimportant. In fact, it is actually valuable, because about 40 to 60 per cent of cooking time is utilized in breaking down the same percentage of cells that we break down in freezing. Therefore, peas or spinach which have been frozen can be cooked in from two-thirds to half the time that is required for the same products fresh.

Dr. Hawkins: I was under the impression that you did some work out in Portland, Oregon, with the freezing of berries.

Mr. Birdseye: We did a lot of work out there, and we are freezing the same products again this year as a result of the way they have sold in Springfield. On the other hand, these berries and vegetable products are not identical with the fresh unfrozen products, as our meat products are. They are a commercial product, however, and we did have sufficient success so that we are freezing the same things over in large quantities this year.

Dr. Hawkins: Did you use sugar?

Mr. Birdseye: No, we did not use sugar in any of the berries.

Dr. Hawkins: Did you get any fading?

Mr. Birdseye: We got very little fading and no oxidation, principally, I think, because the product is frozen so fast that oxidation doesn't occur during the freezing. But there is a whole lot we don't know about the freezing of vegetable matter.

Mr. Switzler: Will you add a word about the distributing of your orange juice?

Mr. Birdseye: Our principal discovery to date is that it is a mighty difficult thing to deal with. We have succeeded in freezing it so that it is perfect. We have succeeded in freezing it in Gloucester and shipping it back to the technical experts of the Florida Citrus Growers Exchange, in Florida, in such perfect condition that they could not distinguish it from fresh-squeezed juice. On the other hand, that same product, held for a month or two months or three months, became oxidized, changed its flavor and became totally worthless. With orange juice, the problem does not seem to be one of freezing as much as of properly protecting the frozen product from changing flavor after it has been frozen. We are making some progress in that direction.

Mr. Radcliffe: Have oysters been a success?

Mr. Birdseye: Oysters freeze perfectly. So much so that at a recent dinner at which we served oyster stew made from the frozen oysters, the president of the largest oyster company in the United States was present and was interested to find out where we had gotten such unusually good oysters, and especially oysters which were so tender; and when he was informed that they were his own oysters, which had been quick frozen, he was considerably surprised. They are equally good when they are to be eaten raw.

Of course, it isn't commercially feasible to freeze them in the shell, though we have as a stunt taken them out of the shell, saved the shell, thawed them and put them back on the shell, and had nobody able to tell the difference from the fresh-opened oysters.

Mr. Townshend: I should like to ask Mr. Birdseye what manner of package and what shipping container was used with the raspberries presently moving to New Zealand?

Mr. Birdseye: The raspberries, peas, spinach, lamb and pork chops, and fish of various kinds, all packed in individual paper cartons, were put in a wooden box holding about a hundred pounds, the inside of the box being lined with some four inches of Celotex. The only object of the insulation was to prevent the product thawing between our plant and the time it got aboard the refrigeration room in the steamer, and the same at the other end.

Mr. Townshend: Are the berries in an individual pound or other package?

Mr. Birdseye: Individual pint packages. Incidentally, I might say there is still a lot to learn about the individual packages. We have not found or developed anything yet that is entirely satisfactory for juicy things, things that are practically liquid, such as orange juice and fresh fruits. That is one of the difficulties we are up against.

Dr. Pennington: Do you find any tendency for the crystals to grow on long storage, the very small crystals, if they are held in your desired temperature? Do they grow?

Mr. Birdseye: They do grow in fish fillets, especially if those fillets have been brined in order to bring out the flavor; and they grow more seriously if the temperature is too high and still more seriously if the temperature is allowed to fluctuate. But the fact is they do not grow enough to damage the marketability even of the fish products. I have not noticed that the crystals build up at all with any of the meat or poultry products.

Quenching the Navy's Thirst

UNCLE SAM'S tars aboard the U.S.S. Texas like to haunt the ship's canteen where refreshing beverages are dispensed from the soda fountain there. Judging from the picture the rally 'round the fountain meets the approval of the middies.

The soda fountain is made entirely of Monel metal, which was specified not only because of its resistance to salt air corrosion, but also because of its strength. Owing to the location of the fountain, construction of a non-metallic substance would be in danger of cracking when the big guns are fired. Practically the only parts of the fountain which are not Monel are the porcelain flavor receptacles and the other porcelain work shown in the picture. This fountain is equipped with a Frigidaire compressor unit.

Seagoing Refrigerators

RECENT shipbuilding news reveals that electric refrigeration is finding an important place in modern marine construction. Large ocean liners rapidly are entering the list of users, and most of the newer pleasure yachts are taking to this method of refrigeration, a study of Frigidaire installation records show.

J. P. Morgan's new $2,500,000 Corsair II, the largest private pleasure yacht in the world, slid down the ways at Bath, Me., recently, bearing in her hull a Frigidaire installation well in keeping with the rest of the equipment on this leviathan of yachts.

H. B. Small, dealer at Bath, made the installation, which provides for ice making and storing, food storage and water cooling. Power for the equipment, which consists of two air-cooled compressors and a number of finned coils, comes from a turbine-driven generator capable of lighting a city of 15,000 persons.

The Corsair is the largest yacht in the world with the exception of those owned by the kings of Siam and Italy. Remarkable among the details of construction of this latest of the line of Morgan Corsairs is the fact that the vessel includes no gyroscope. This device, installed on the majority of new pleasure yachts to minimize rolling, was tabooed by Mr. Morgan, who likes the roll of the sea and delights in rough weather.

Another new and well known yacht to include Frigidaire in its original equipment is the Olive K., owned by C. F. Kettering, vice-president of General Motors in charge of research. The Olive K., constructed last year, is one of the most remarkable vessels of its class afloat, embodying many engineering refinements developed by her famous engineer owner. Most important among these improvements is an electrical locking device which synchronizes the two big Diesel engines in order to overcome vibration, which has been almost entirely eliminated.

The Olive K. refrigerating equipment includes a vegetable storage room, a cold storage chamber, two serving cabinets of household type, and several water coolers. The air-cooled compressors furnish refrigeration and a spare compressor has been installed so that it can be connected to any piece of equipment by turning a valve.

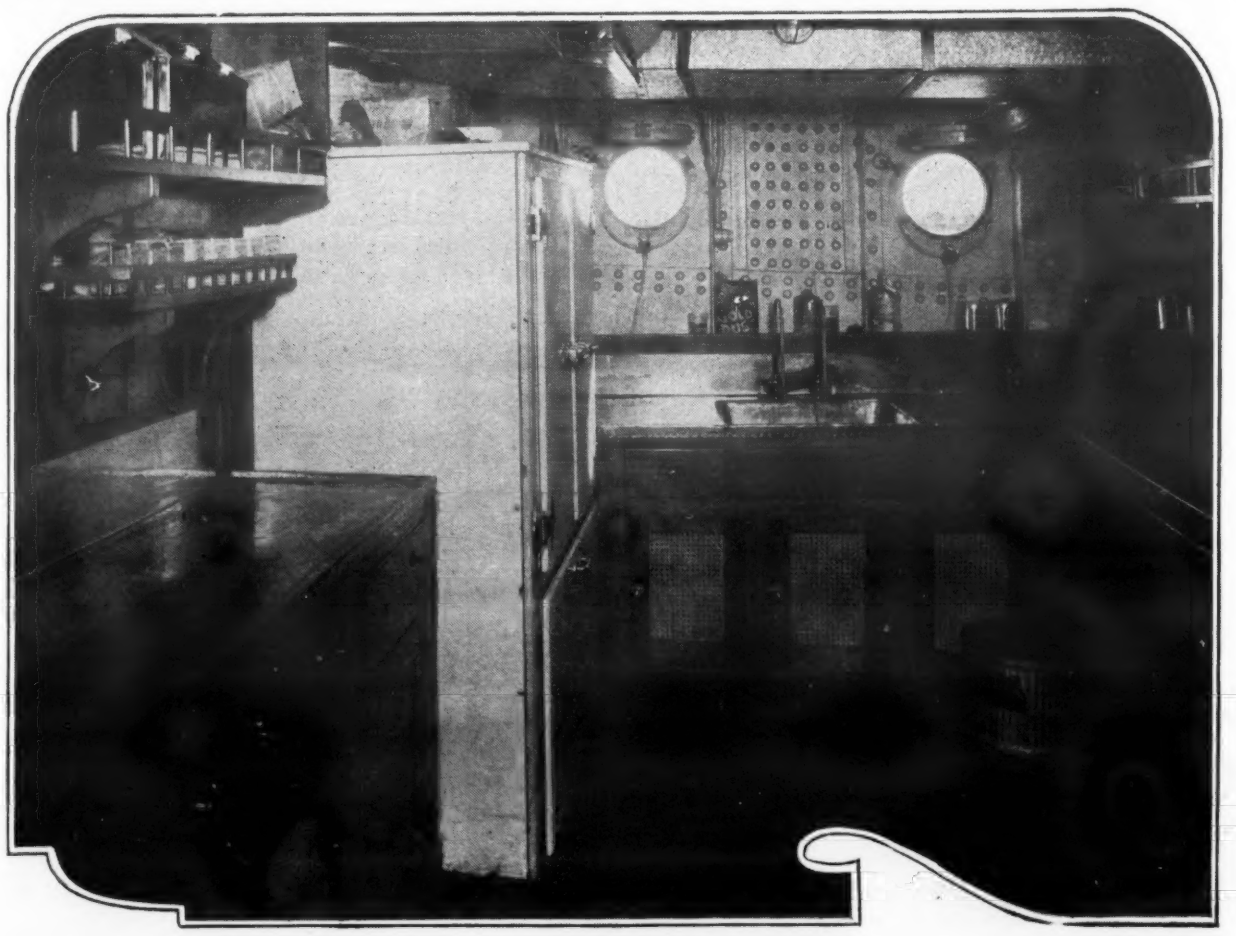
Frigidaire received a good test on the maiden cruise of the Olive K., made in January to the Galapagos Islands, on the equator, off the western coast of South America. Perfect refrigeration was delivered at all times under the consistent heat of the equator.

It remained for an iguana, a lizard of the Galapagos, which had been captured by one of the sailors, to cause the only refrigeration trouble of the cruise This iguana, in a moment of curiosity, crawled into the flywheel of one of the compressors while it was in operation. The spare compressor was started while the other was repaired, but the iguana was forever lost as a live specimen of equatorial fuana.

Two polar expeditions have taken Frigidaire equipment in their boats. The MacMillan expedition used Frigidaire in the Bowdoin. With outside temperatures rarely going above the zero mark, refrigeration was needed to preserve foods kept in the warm interior of the ship. The Byrd Antarctic expedition carried Frigidaire water cooling equipment in the "City of New York," to insure a constant supply of properly cooled water for the crew.

The steamship Leviathan, flagship of the United States lines, contains a unit refrigeration system including food storage, water cooling and ice cream cabinet equipment. The Bremen, Germany's famous liner, made her record voyage across the Atlantic with a Frigidaire soda fountain aboard. Among Italian vessels to be equipped with Frigidaire are the Sauternia, Vulcania and Augustus. The new Britannic of the White Star Line, and the Lafayette of the French line, also will be equipped with this type of refrigeration.

The Italian navy has standardized on Frigidaire equipment for its submarine service, and all new undersea vessels will be so fitted out before they put to sea. This equipment was selected by the Italian navy following a long series of tests. On account of the vibration aboard ship and the pitching to which an electric refrigerator is subjected at sea, satisfactory service under such conditions is regarded as an unusually severe test for this type of mechanical equipment.



Frigidaire in the Galley of the Olive K

DIEHL

Sees Big Future for Frozen Berries

THE frozen-pack method of preserving strawberries, raspberries, loganberries, and, to some extent, sour cherries, in small containers for domestic use offers much promise, says H. C. Diehl, of the Bureau of Plant Industry. "The behavior of blackberries, black raspberries, and sweet cherries, packed for freezing in small containers, is not yet understood so clearly as to insure consistent success," he adds. "Apricots and peaches present for solution questions even more technical. Some fruits, such as Bartlett pears and melons, do not seem suited for frozen pack. Frozen packing of vegetables should be considered as entirely in the experimental stage, and should not be attempted commercially until no shadow of doubt that frozen-pack vegetables are safe for human consumption remains."

The Bureau of Plant Industry has conducted experiments since 1924 in an effort to solve some of the problems involved in packing small fruits for freezing in containers, such as the 50-gallon barrel, the standard package for the greater part of the frozen pack of the Northwest. These experiments have dealt with rates of cooling and freezing, the effects of different sugar concentrations, the effects of different methods of handling, and the development of yeasts and molds.

"The frozen-pack experiments in 1929 were planned to determine primarily the behavior of different kinds and varieties of fruits and vegetables, when packed at points of origin with different sweetening agents or condiments, and when frozen in paper, tin, or glass containers at different freezing temperatures, in some cases after being exhausted to varying degrees of vacuum," Mr. Diehl continues. "The requisites of a satisfactory pack in small containers are: Fully matured, clean, well-graded raw material; a fruit mass covered with syrup or sweetened juice and having an attractive color, free from fading or surface discoloration; quick cooling and adequate freezing; agreeable texture, flavor, and aroma; absence of surface mold, fermentation, or decomposition; a package that is satisfactorily full when thawed; and an attractive package, tightly sealed, easily handled in packing, of material which reduces or prevents the passage of oxygen to the interior and which will not unduly retard cooling."

Packing frozen fruit in small containers that may be sold direct to consumers is an entirely new development in the marketing of horticultural products. To what extent this method can be developed is a matter of speculation, but it appears to have real possibilities with certain fruits. Much commercial and laboratory research will be necessary to put this industry on a completely dependable basis, in Mr. Diehl's opinion.—*Official Record, U. S. Dept. of Agriculture.*

CELLOPHANE PRICE REDUCTIONS ANNOUNCED BY DUPONT

Cellophane, which is extensively used by the producers of quick-frozen foods, is getting cheaper. The Dupont Cellophane Co. announces three reductions in price. The first became effective on May 26, and the others are scheduled for Aug. 1, and Oct. 1, next.

These reductions have been made possible by increasing the facilities for production. Since cellophane was put on the market six years ago, eleven price reductions (including the three just mentioned) have been announced. The new prices will be approximately 25 per cent of the original price of cellophane.

Increased production of moisture-proof cellophane is promised in the near future. Prices will be reduced as manufacturing facilities are increased.

GEORGIA POWER CO. PLANS TO FREEZE FRUITS AND VEGETABLES

Atlanta, Ga.—The Georgia Power Company has joined the ranks of those organizations in the state interested in the freezing of fruits and vegetables. A big unit, designed for this sort of work, has been installed and plans are being made for the freezing of tomatoes, spinach and raspberries.

RECORD SALES MONTH

Chicago, Ill.—The Dry-Zero Corporation, manufacturers of insulation, reports that the month just closed was the largest in dollars and cents value ever enjoyed by that company. March and April were also big months for this company.

Recently P. B. Johnson Watt, one of the largest manufacturers of refrigeration and allied lines in Australia, took over the distribution of Dry-Zero for a large portion of that continent.

In Two Parts—Part 1

ELECTRIC REFRIGERATION NEWS

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The business newspaper of the refrigeration industry

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A FINE TIME IS HAD BY JONAH THE GOAT AT LOSERS' EXPENSE

Low Teams in Sales Campaign Feed Him Well

A COMMON, ordinary Billy Goat materially assisted the Broad River Power Company, with headquarters in Columbia, S. C., in outdistancing all other operating companies in a Refrigeration Jubilee conducted by the Associated Gas & Electric System from April 15 to June 1.

Jonah—as the Billy Goat was dubbed—was not only a mascot but was an inspiration to the members of the competing teams organized by the merchandise department of the Broad River Power Company—that kind of an inspiration to work hard in order to keep Jonah as far from their possession as possible. Jonah was injected to the refrigeration campaign for the purpose of inspiring salesmen and employees to greater efforts. He was the property of the merchandise department for the first week of sales activities, but at the end of that time was turned over to the team that was in last place in percentage of quota. He remained the property of that team until the members succeeded in pulling their squad out of last place. Before the campaign ended Jonah had taken on considerable weight. There was a very good reason for this increase, for the team falling heir to Jonah each Monday morning had to pay a penalty of 50 cents for every pound the Billy Goat lost, and because of this rule and regulation, Jonah had no worry over getting three square meals a day. In addition to the penalty of fifty cents, the team having the lowest average at the end of each week had to take care of Jonah and parade him up and down the main thoroughfare of the town for one hour each day. Jonah, himself, because of this regulation, was a very good advertisement. On his back was a saddle and on this saddle was imprinted in big red letters, "Join the Refrigeration Jubilee, Broad River Power Company."

Mascot Enjoys Campaign

In every campaign it is well to have some element of fun, provided, of course, this element of play does not overshadow or interfere with the serious side of the work. There is no doubt but what Jonah acted as a stimulus during the Broad River Power Company campaign. Caught in a pasture and as wild as a buck, the whiskered mascot was soon tamed and seemed to enjoy every minute of the campaign.

In spite of his importance, Jonah was not the only thing that was responsible for the Broad River Power Company selling 469 refrigerators over a period of six weeks. The company made 601% of the quota set by the Jubilee Advisory board of the Associated Gas & Electric System, and this enviable record was due in a large measure to the wholehearted co-operation of every employee in setting forth the merits of electric refrigerators and in getting 469 names on the dotted line. There were very few employees that did not sell at least one refrigerator during the campaign, and at the end of the sales activities it is pretty safe to say that there were not a half dozen customers in the Broad River Power Company territory who could say they had not been approached by either a full time salesman or an employee. The wholehearted co-operation of N. H. Coit, vice-president and general manager of the Broad River Power Company, and the leadership and pep instilled by W. E. Leverette, merchandise manager, in his men, were also important factors in the success of the campaign.

Employees Rival Salesmen

Before the refrigeration campaign started, the company conducted a sales school to which every employee was invited to attend. Those who took advantage of this opportunity to learn something about the products that were to be sold were placed on teams. Each team was captained by a full time salesman and everyone had a sponsor—a young lady in the organization. The employees either actually sold the appliance or turned in prospect cards and had the captain go with them to help close the sale. In a number of instances employees succeeded in placing refrigerators in the homes without any help from one of the salesmen, but in most instances the salesman and a member of his team worked hand in hand.

The first thing in the minds of those conducting the campaign was to reach 100% of its quota. This was soon accomplished and the next thing was to go 200% of its quota. Towards the latter part of the campaign it was evident that the company was in a fair way of making 500% of its quota, so this was set as an ultimate goal. A chart was prepared and each day results of the campaign were noted on it. At the top of the chart were the words, "Goal 500%—390 Machines." Everyone set to work to reach this goal, and on May 29, two days before the campaign closed, it was necessary to add a "fifth floor" to the chart in order to accurately record the progress of the campaign,

(*Concluded on Page 4, Column 4*)

CHICAGO COUNCIL DEFERS ACTION ON CODE

Chicago, Ill.—June 18: Action on the refrigeration ordinances was put off this afternoon by the City Council for a period of two weeks. At the next meeting to be held on July 2nd, the refrigeration codes will be considered in special order which means that there is every likelihood that final action will be taken.

The Council Chamber was crowded today by persons who expected that a decision would be reached, but Alderman James B. Bowles moved that both the majority report of the Health committee and the minority report, which is backed by Health Commissioner Kegel, be deferred until July 2.

Considerable excitement prevailed when Alderman Joseph C. Ross arose and voiced objections to letters written by Dr. Kegel to the various members of the Council. Several aldermen came to Dr. Kegel's support, and after some highly animated discussion Mayor Thompson's pounding for order was heard and obeyed.

Passing the Buck

Jonah Acquires New Set of Caretakers

ASSOCIATED COMPANIES EXCEED ALL OLD MARKS

New York, N. Y.—Approximately 13,741 mechanical refrigerators were added to the lines of the Associated Gas and Electric System during the spring campaigns conducted by member companies. During the spring months, six-week campaigns were in vogue about the system and employees manifested deep interest in the sale of mechanical refrigeration. About 230 carload orders were needed to supply the big demand for machines, created as a direct result of the concentrated selling efforts. The total sales more than double the number of refrigerators sold by the entire system during all of last year.

Employees other than in merchandise departments co-operated in making the 1930 drive a successful one. Their efforts were enlisted in the task of uncovering prospects. The contest idea made the task during the six weeks more interesting and a number of schemes were used by the various companies. In many cases the member companies oversold their quotas by large margins and officials believe that the enthusiasm on the part of the employees accounted for this.

Kelvinator, Frigidaire, General Electric, Electrolux and other makes were featured. Special inducements were made to prospects and advertising carried the appeal to buying public. The Associated System is serving over 1,368,000 customers. Sales of appliances so far this year by the companies have passed the $5,000,000 mark.

ABSOPURE CORPORATION ELECTS NEW OFFICERS

Detroit, Mich.—A realignment of directing forces has taken place in the Absopure Refrigeration Corporation of this city. A new set of officers took hold of the business at the conclusion of a directors' meeting held on June 14. Hiram M. Browne continues as vice-president and general manager, while W. J. Carlyle, second vice-president of the Union Guardian Trust Co. of Detroit, steps into the Absopure organization as president. N. M. Gross, vice-president of the Federal Bond & Mortgage Co., is first vice-president, and Mr. Browne is second vice-president. J. H. Nugent is treasurer and Y. G. Smith, secretary.

The new board of directors contains the names of a number of well known men and the board is making plans for an active sales campaign. In the last few months, the Absopure Corporation has been undergoing a gradual reorganization which has culminated in the election of new officials. The members of the board of directors are: W. H. Carlyle, Second Vice-President of the Union Guardian Trust Company; N. M. Gross, Vice-President of the Federal Bond & Mortgage; Hiram M. Browne, General Manager of Absopure Refrigeration Corporation, Detroit, Mich.; Y. G. Smith, Beaumont, Smith & Harris, Attorneys; J. H. Nugent, Treasurer of Absopure Refrigeration Corporation, Detroit, Mich.; S. A. Hutchinson, Union Guardian Trust Company, Detroit, Mich.; E. J. Quint, Attorney; H. C. Hayes, Director of Engineering of Absopure Refrigeration Corporation, Detroit, Mich.; D. A. Brown, Chairman of Board of Directors of the Broadway National Bank & Trust Company of New York; H. Z. Brown, Pres. of Brownwell Corporation, Detroit, Mich.; I. C. Brown, retired, Detroit, Mich.

With a limited but steady production and the simultaneous development of new distributing outlets, Absopure has been doing a constantly increasing business in the last two or three months. Absopure is now represented in sixteen states and considerable business is being done abroad.

Several domestic units of varying sizes are now being manufactured, one of the most popular being the "Baby Grand," the smallest model of the lot. Seeger cabinets are being used in the de luxe line. The Absopure refrigerators are equipped with a fin coil for cooling the food storage chamber, and a second coil of metal tubing for freezing ice. This second coil is in close contact with the ice trays and is so arranged that the freezing time is speeded up. A number of multiple unit jobs also have been built, a shipment of several such set-ups leaving last week for Los Angeles, where they will go into some new apartment houses.

At present the company is doing from $70,000 to $80,000 business a month, with a steady increase in sight. An un-

(*Concluded on Page 13, Column 1*)

ROWLES PUT IN CHARGE OF AMERICAN ACE SALES

Mishawaka, Ind.—W. C. Rowles has been appointed general sales manager of the refrigerator division of the American Foundry Equipment Company of this city, manufacturers of American Ace automatic refrigeration for commercial use. (See photograph on page 16.)

Mr. Rowles brings to the American Ace organization a wealth of experience in refrigeration. In 1918 he was with the Guardian Frigerator Company, which in that year was changed to the Frigidaire Corporation. He served Frigidaire in various capacities, successively, in charge of engineering and manufacturing, as assistant general manager and as branch manager, and later as a consultant on manufacturing and engineering.

During the last four and a half years he has been with the Climax Engineering Company, of Clinton, Iowa, part of this time as sales engineer in charge of the eastern division of the United States and later as assistant to the president.

Mr. Rowles spent nine years in the automotive industry, both in manufacturing and sales. He was assistant plant manager of Chevrolet and later works manager of Monroe Motors. He will be in entire charge of the merchandising program on the American Ace and is enthusiastic about the prospects for this commercial refrigeration unit, pointing out that the American Ace, a hermetically sealed unit for commercial applications is equally adaptable to remote and unit installations.

REFRIGERATOR PLAYS IMPORTANT ROLE AT N.E.L.A. CONVENTION

Martin Insull Calls It a Major Load Builder

San Francisco, Calif.—June 18: The importance of electric refrigeration is gaining increasing recognition. The National Electric Light Association, which is holding its fifty-third convention here this week, is working out a program in which refrigeration will become one of the N. E. L. A.'s important activities. It is expected that this program will be complete in thirty days.

A stage pageant, in which the major home services were dramatized, disclosed electric refrigeration as playing a prominent part in the country's electric development.

In an address at the Commercial Section session this afternoon, Martin J. Insull, of Chicago, speaking on "Load Building Opportunities Ahead of Us," referred frequently to refrigeration. He said:

"In domestic consumption we have seen the average customer's use grow from 457 kilowatt hours in 1927, to 477 kilowatt hours in 1928, and to 512 kilowatt hours in 1929. This is scarcely scratching the possibilities. Hardly a beginning has been made in the major load builders. Refrigerators are in only 10 per cent of the homes.

"A few examples will show how strikingly domestic consumption can be increased with properly directed merchandising. If an additional 25 per cent saturation of range business could be developed the average domestic consumption would be increased from 512 to 856 kilowatt hours. An additional 50 per cent saturation would raise the consumption to 1,200 kilowatt hours.

"If we could obtain 25 per cent additional saturation of range business and 25 per cent additional saturation of refrigeration business on existing lines the average domestic consumption would be raised to more than 1,000 kilowatt hours annually. If range, refrigerator and water heater business on existing lines were each increased 25 per cent the consumption would reach the gratifying

(*Concluded on Page 16, Column 1*)

WAYNE ADVANCES CLARK TO DIRECT SALES WORK

Fort Wayne, Ind.—Arthur W. Clark has recently been elected director of sales for the Wayne Home Equipment Company and will have charge of all branch offices and individual territories. Mr. Clark will make his headquarters at Ft. Wayne. (See photograph on page 16.)

Mr. Clark has been with the Wayne Company for fifteen years as district manager at Boston. He was past president of the Boston Kiwanis Club, past president of the Boston Oil Burner Association, and past president of the Greater New York Heating Association. Mr. Clark is prominent in fraternal and political affairs, having served as campaign director for the present Mayor of Boston, James H. Curley, for two successive elections.

The Wayne Company reports that sales show a considerable increase over last year and distribution of Wayne refrigerators and oil burners is now being extended to seven foreign countries and practically every state in the Union.

GEORGIA POWER CO. NEARS END OF SALES CAMPAIGN

Atlanta, Ga.—The Georgia Power bandwagon is rapidly nearing the finish in the big refrigeration campaign. On June 12, the Georgians reported sales totaling $694,518.00, or 81.7 per cent of the total quota. The bandwagon is speeding along on its mythical trip about the state and is away ahead of Old Man Quota on his motocycle. The campaign winds up on July 3 and it is expected that sales will greatly exceed the $850,000 quota.

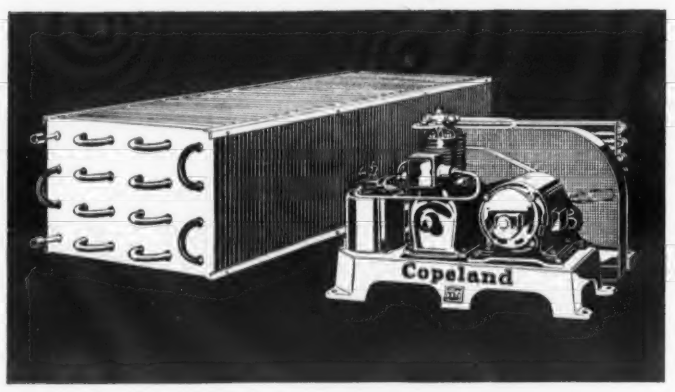
Many of the districts have sold their quota already, and the stragglers are fast gaining momentum as the drive progresses. General Electric domestic refrigerators, Kelvinator and General Electric commercial equipment are being pushed in the campaign. Prizes are being awarded to the leading salesmen and managers each week for the best performance.

G. E.'s WIN PLACE AT HOLYOKE COLLEGE

Holyoke, Mass.—Ned Squire, General Electric dealer here, is equipping Mount Holyoke College, South Hadley, with General Electric equipment. A DB-1 water cooler, G-40 and G-100 refrigerators have already been installed. A DB-1 water cooler also has been installed for the Board of Public Works here.

With the coming of Summer, Mr. Squire believes that sales of refrigerators will greatly increase.

COPELAND COMMERCIAL REFRIGERATION HAS AN ENVIABLE RECORD OF SUCCESS



• • • Every installation gives complete satisfaction and leads to further sales!

Copeland commercial refrigerating equipment performs so consistently that practically every installation brings in additional prospects and leads to further sales. Owners are quick to tell other prospective buyers about the advantages they enjoy by reason of having bought Copeland.

These advantages are vital. They include freedom from troublesome frost on the cooling coils—from dehydration or drying out of foods—from the defrosting nuisance. For Copeland commercial units maintain uniform low temperatures without formation of heavy frost deposits, and with minimum running expense.

It is possible that the expansion in Copeland's distributing organization has opened up desirable territory in your vicinity. Write us for further details about this profitable franchise —TODAY!

COPELAND SALES COMPANY
MOUNT CLEMENS, MICHIGAN

Copeland's Crew in the Northwest

NORTHWESTERN Copeland dealers assembled in Seattle, Wash., on May 26-27, for a two-day convention at Harper-Meggee, Inc., distributors for that territory. This was the occasion of the fourth annual Copeland sales conference and the dealers and salesmen were quite enthusiastic over the new Copeland line and the prospects of making this year a record-breaking one. W. D. McElhinny, vice-president in charge of Copeland sales, who contacted dealers in the West, was the principal speaker at the meeting. Officials of Harper-Meggee also spoke.

GREATER USE OF HARDWOODS IN CABINETS URGED

Memphis, Tenn.—A determined movement to further the use of hardwoods in the manufacture of refrigerator cabinets was started at a luncheon meeting of the Lumbermen's Club of Memphis. Resolutions were adopted condemning what was termed unfair advertising in favor of wood substitutes. The resolutions were drawn by the trade extension committee, with C. Arthur Bruce chairman, and D. R. Brewster, Frank A. Conkling and George C. Eheman members.

EDWARD JORGENSON FINDS POT OF GOLD

Omaha, Neb.—To spur salesmen to stronger effort during the month of May, W. A. Davies, city sales manager of the Storz Electric Refrigeration Co., Omaha, staged the "Rainbow" contest. His force was divided into two teams. The winning team in the contest had nearly $500 to divide among its members. In addition to that, the Storz manager gave the individual salesman beating any previous high record a purse of $25.

Ed Jorgenson was the man who found a pot of gold at the foot of the rainbow, when the clouds rolled away. For eleven months Paul Noble held the honor with 17 machines sold in one month. Jorgenson trimmed him in May and established a new high record of 20 sales for the month. Mr. Jorgenson is a man about thirty years of age, fine physique, a jolly fellow well met at all times—a type of man Mr. Davies has found invariably makes good on sales.

As a consequence of the May contest, Mr. Jorgenson now has $175 in gold to jingle before the eyes of the other salesmen. A similar contest, dubbed the Airplane, is now under way for this month.

REFRIGERATORS TOP APPLIANCE SALES

St. Joseph, Mo.—During the month of May, the new business department of the St. Joseph Railway, Light, Heat & Power Company sold 114 domestic and 14 commercial Frigidaires. Electric refrigerators not only led in the dollar value of the appliances sold during the month, but also in the number of sales. Carl M. Walter was high salesman, with a volume of $5,733.18. Total sales for the month amounted to $50,163.57.

STEWART COMPANY'S ASSETS BEING LIQUEFIED

Los Angeles, Calif.—At a meeting of the creditors of the Stewart Ice Machine Company, here a short time ago, it was decided to discontinue the operation of the business, close the plant and proceed with liquidation of the assets. The company passed into the hands of the creditors on April 16.

Kelvinator's Convention in London

ELECTRIC refrigeration men attending a recent convention of Kelvinator, Limited, London, England. The picture was taken outside of the warehouse at 258 Gray's Inn Road, London. R. Searle, managing director, is fourth from the left, wearing a derby hat.

BUSH COMPANY ADDING TO HARTFORD PLANT

Hartford, Conn.—The Bush Manufacturing Company announces the erection of an addition to its plant, work upon which has already been started.

Contract for the building, which is to be of brick and steel construction, has been awarded to the firm of Allyn Wadhams Co., of Hartford. The architects are Mylchreest & Reynolds, also of this city. It is expected that the building will be completed about July 10.

The Bush Company specializes in the manufacture of condensers and finned tubing for the electric refrigeration industry. J. W. Hatch, treasurer and general manager, states that the new building has been made necessary because of the rapidly growing business of the company, and points out that the first half of 1930 shows a decided increase in business over the corresponding period a year ago. Large deliveries are scheduled for July and August by the company.

KELVINATOR FREEZING TESTS POPULAR

Kansas City, Mo.—The Western Kelvinator Company began a ten-day quick freezing of ice demonstration here June 9.

The manager, C. E. Wight, is pleased with the results so far, forty having witnessed the demonstration the first day.

The Western Kelvinator Company recently installed 140 Kelvinators in a multiple installation in the Gaylord apartments on Troost Avenue.

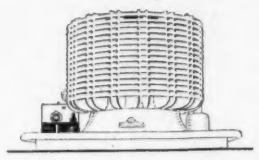
The leading refrigerator manufacturers are using our Double Seal and special gaskets made for their requirements. We will be glad to figure on your problem.

Specialists in refrigeration gasket.

BOSLEY'S Since 1869 The VERY BEST QUALITY SERVICE WEATHER STRIP

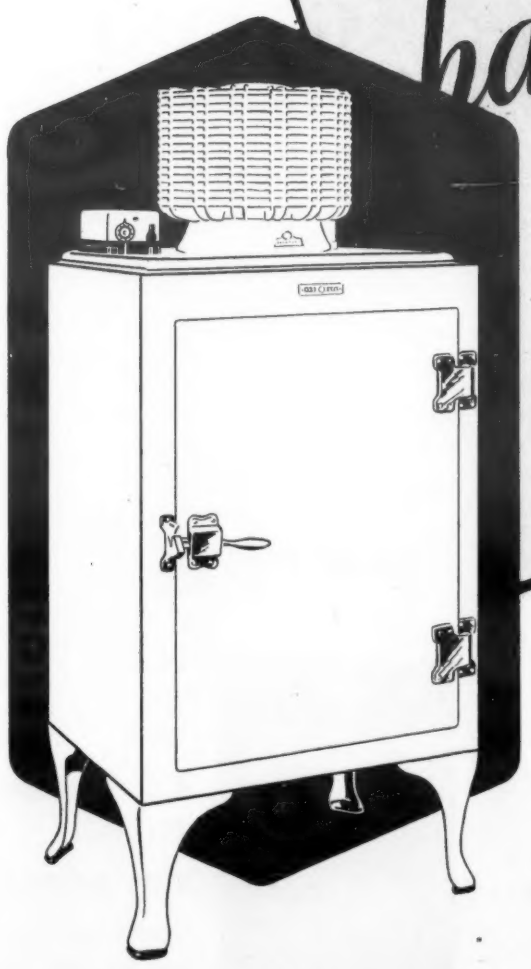
The D.W. Bosley Company
906 Marquette Bldg.
Chicago, Ill.

EXTRA DRY ESOTOO
THE PUREST
SULPHUR DIOXIDE
Analysis Guaranteed
WE HAVE AN AGENT, WITH OUR PRODUCT IN STOCK NEAR YOU. — WIRE US WHERE WE CAN SERVE YOU
VIRGINIA SMELTING CO. West Norfolk Va
F.A. EUSTIS, Sec. - 131 State St. BOSTON - 2 Rector St. NEW YORK



The MONITOR TOP *makes this record possible!*

NO OWNER *of a* GENERAL ELECTRIC *has paid* 1¢ *for service*



In selling your prospects, feature the *Monitor Top*. It is the *Monitor Top* that is responsible for the General Electric Refrigerator's famous record.

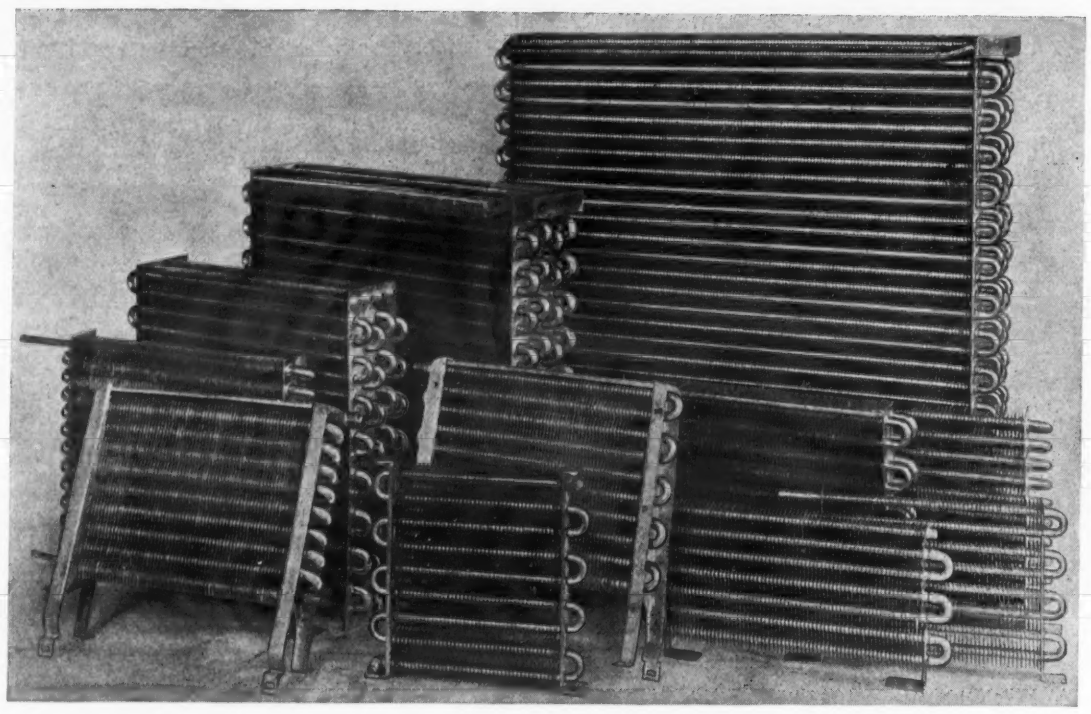
In the Monitor Top, all the moving parts are barricaded with steel walls *hermetically sealed* against the wear caused by dirt, air or moisture. In selling your prospects, feature the dependability, the durability, the economical operation of the mechanism that is *sealed in steel.*

No owner has paid a cent for service. In selling your prospects, explain the reason *why*. *The General Electric Monitor Top!*

GENERAL ELECTRIC
ALL-STEEL REFRIGERATOR

ELECTRIC REFRIGERATION DEPARTMENT, GENERAL ELECTRIC COMPANY, HANNA BUILDING, CLEVELAND, OHIO

BUSH
CONDENSERS



Extensive facilities for manufacturing condensers for the smallest household refrigerators to the largest commercial size units.

SEAMLESS COPPER TUBES
« INDIVIDUAL FINS »
MAXIMUM EFFICIENCY

LISTED AS STANDARD BY
UNDERWRITERS LABORATORIES, INC.
CHICAGO

A PARTIAL LIST OF REFRIGERATORS IN WHICH BUSH CONDENSERS ARE USED

Absopure	Femcold	Kulair
American Ace	Fisher (Canada)	National
Bryant	Frankenberg	Parker
Calectro Frost	Freezel	Universal Cooler
Champion	Frig-O-Matic	Warner
Chilrite	Ice Berg	Wayne
Copeland	Icelect	Williams Ice-O-Matic
Dairy Refrigeration	International	Zerozone
Electro-KOLD	Kelvinator	

WRITE US ABOUT YOUR NEEDS

THE BUSH MFG. CO.
HARTFORD, CONN.

W. H. MARK HANNA
6-247 GENERAL MOTORS BLDG., DETROIT, MICH.

JONAH IS THE GOAT FOR REFRIGERATOR SALESMEN

(*Concluded from Page 1, Column 2*)

for the teams—aided and abetted by Jonah's influence—had pushed the Jubilee over 500% and were well on their way to a further goal of 600%. On the last day of the campaign 56 refrigerators were sold, making the total 469 for six weeks and forcing the chart "Architect" to add a "sixth story" to the progress structure that hung on the wall in the sales office.

The final quota of 601% surpassed by 161% the quota made by the Florida Public Service Company, another subsidiary of the Associated Gas & Electric System, who had conducted its campaign during the months of January and February. When the Florida campaign closed, everyone in the Associated System thought that their record of 440% would be very hard to beat. No question but what this company had done a fine job and had set a high mark for the rest of the Associated properties to aim at. The record made by the Broad River Power Company in outdistancing all of its sister subsidiaries has given it a prestige not only in the Associated Gas & Electric System, but among other power companies in the south. The merchandise department of the South Caroline Company is very young, having only been started in October, 1929. The sales organization has always been given the co-operation of employees in every merchandise campaign conducted during the eight months of its existence. But never before has it been given such wholehearted support as in the Refrigeration Jubilee concluded on June 1.

PACIFIC POWER CO. SETS BIG REFRIGERATOR QUOTA

Portland, Ore.—The Pacific Power & Light Company has established a quota of 1,100 refrigerators to be sold during this year to its domestic meter list, which totals 40,122. According to V. H. Moon, merchandise manager, it is estimated that refrigerator sales by his organization during 1930 will be 26% of the value of the company's merchandise sales, and will bring an additional annual revenue of $22,000, or 12.2%, to be built through the sale of domestic merchandise.

An extensive advertising and sales promotion program has been in effect since the first of the year and will be continued throughout December. Newspaper advertising, painted highway bulletin boards and direct mail messages are all being used to increase the sale of electric refrigerators. During the summer months the sales of refrigeration equipment are expected to reach new peaks.

"The refrigeration load," Mr. Moon states, "should be particularly attractive to utilities for the following reasons:

"It renders to the customer a very valuable service at comparatively low operating cost.

"It requires little capital investment on the part of the utility to serve.

"Of all appliances generally sold it is third in kilowatt hour consumption and is exceeded in this respect only by ranges and water heaters.

"The refrigerator has the best load factor of any domestic appliance used on metered service."

NEWILL TAKES CHARGE OF FRIGIDAIRE ENGINEERING

Dayton, Ohio—Edward B. Newill, widely known electrical and mechanical engineer, has been appointed vice-president of Frigidaire Corporation in charge of engineering. He is a native of Georgia, a graduate of the Technical High School of Atlanta, and of the George School of Technology. From the latter school he received two degrees, those of Bachelor of Science in Electrical Engineering and Bachelor of Science in Mechanical Engineering, both in 1915.

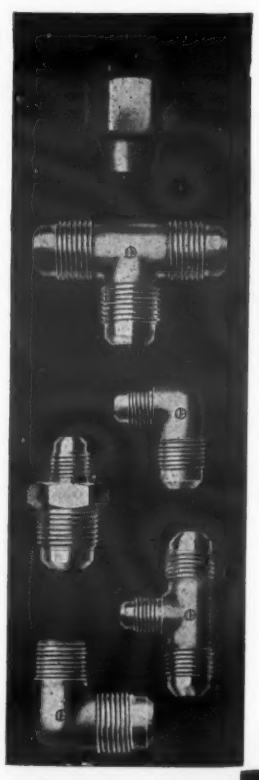
Following his graduation, he joined the Westinghouse organization as a graduate student, spending nearly two years in special scientific courses. His

Edward B. Newill

first official position with that concern was as railway engineer in the direct current motor section.

Later he served as industrial engineer in the automobile equipment section, and subsequent promotions brought him to the position of manager of control engineering. He engaged in the designing of electrical equipment, some of the most interesting of which were automotive generators, wind-driven generators for the Signal Corps and farm lighting plants.

Mr. Newill joined the General Motors Radio Corporation last October as vice-president in charge of engineering. Membership in a number of national scientific organizations are held by the new Frigidaire vice-president. Among them are the American Institute of Electrical Engineers and the National Electrical Manufacturers' Association. He is also affiliated with Kappa Sigma, and Phi Kappa Phi, honorary engineering fraternity.



INSURANCE AGAINST LEAKING

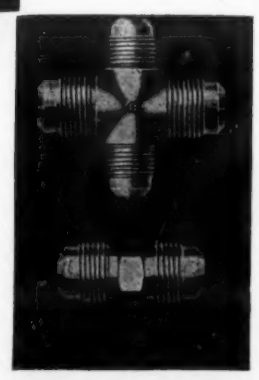
Knowing that leaky, porous fittings condemn even the best automatic refrigeration devices, leaders in the industry have learned by years of practical experience to rely implicitly on Commonwealth Brass Fittings . . . they are

SEEPAGE PROOF
CORRECTLY MACHINED
MINUTELY INSPECTED
CAREFULLY PACKED

They provide the best insurance against leaking and reduce service expenses not only on installation but forever after.

SEND FOR Catalog No. 36, describing the most complete line of fittings for the automatic refrigeration industry.

BUILT RIGHT TO STAY TIGHT

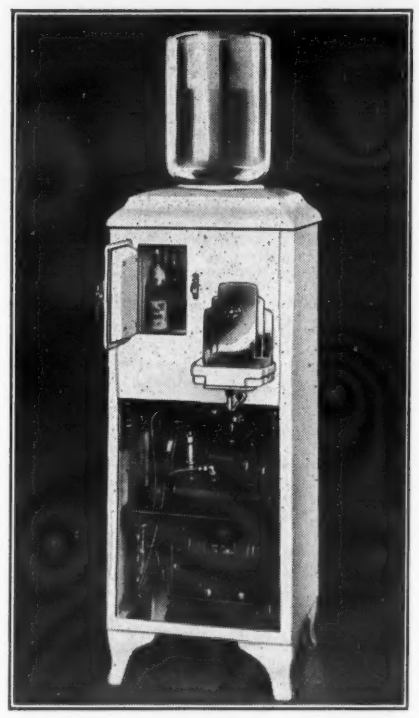


Commonwealth Brass Corporation
Commonwealth at G. T. R. R.
DETROIT, MICHIGAN

New Kelvinator Water Coolers

—another source of substantial profits for Kelvinator dealers

ELECTRIC WATER COOLING takes on a brand new significance with the introduction of Kelvinator's new line of *modern* electric water coolers. Sixteen years of exclusive refrigeration experience have contributed generously toward making this newest Kelvinator product outstanding in the field.



Interior view of Kelvinator Water Cooler Model BW20, showing unique mounting of condensing and cooling units. All adjustments readily accessible.

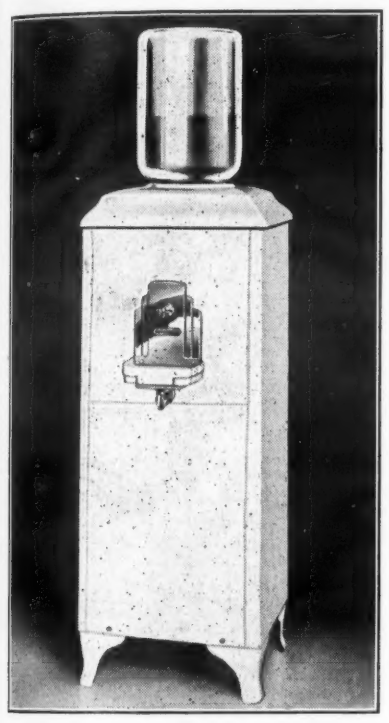
The stamp of newness is brilliantly reflected in every detail of this new line—from the gleaming white all-porcelain tops to the smartly fashioned open-base legs—in a cooling mechanism radically new in design, embodying all of the good features of the "instantaneous" type coupled with the advantages of the "reserve storage" type—in slimly beautiful cabinets of ultra-modern design—and in a mechanical unit designed *expressly* for water cooling.

The line includes two general types—one for cooling bottled water and the other for direct connection to the city water mains. There are models in each type with a special cold storage compartment for cooling bottled goods.

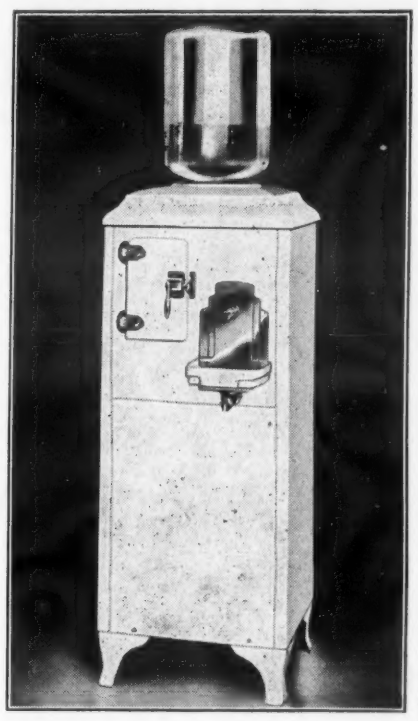
The growing demand for electric water coolers that are smart in style, compact in size, and automatic in operation is amply covered with this complete Kelvinator line. There are sizes appropriate for varying conditions—for clubs, private offices, banks, homes, stores, factories—and all other public institutions.

Kelvinator dealers hold an enviable position in the refrigeration industry with this all-inclusive line of water coolers and the Super-Automatic Kelvinator—*the* refrigerator that has shown the greatest percentage of sales increase in 1930!

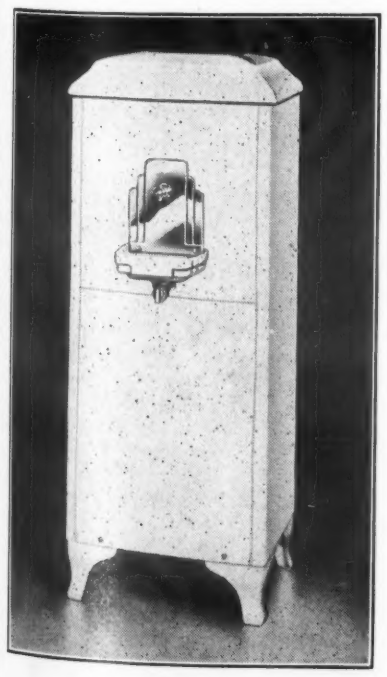
Dealers interested in today's most appealing refrigeration franchise will do well to write for complete information on this new water cooler line as well as full description of the Super-Automatic Kelvinators in three price ranges.



Kelvinator Water Cooler Model BW10—for use with bottled water.



Kelvinator Water Cooler Model BW20—for use with bottled water. Contains special cold storage compartment.



Kelvinator Water Cooler Model CW40—for direct connection to city water mains.

Features of the New Kelvinator Electric Water Coolers

Cabinet—All Steel, Removable legs, 5 in. high. Available in Sage Green Crystal, White or Mahogany. Top of Porcelain-on-Steel.

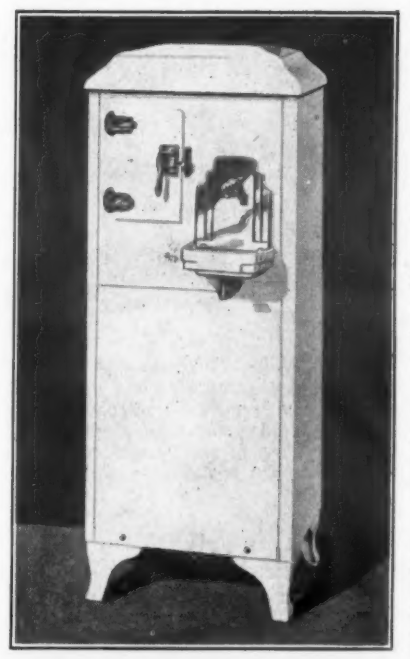
Hardware—Chromium Plated Brass in smart, modernistic treatment, carrying out ensemble effect of entire cabinet.

Cooling Unit—Of special Kelvinator design. Dry expansion, direct cooling. Completely inclosed in porcelain shell.

Mechanical Unit—Especially designed for water cooling. Rugged, trouble-free and *quiet.* All adjustments instantly accessible from front panel.

Temperature Control—Adjustable thermostatic control to give any desired temperature.

Capacity—Available in 3½ and 6 gallon-per-hour sizes.

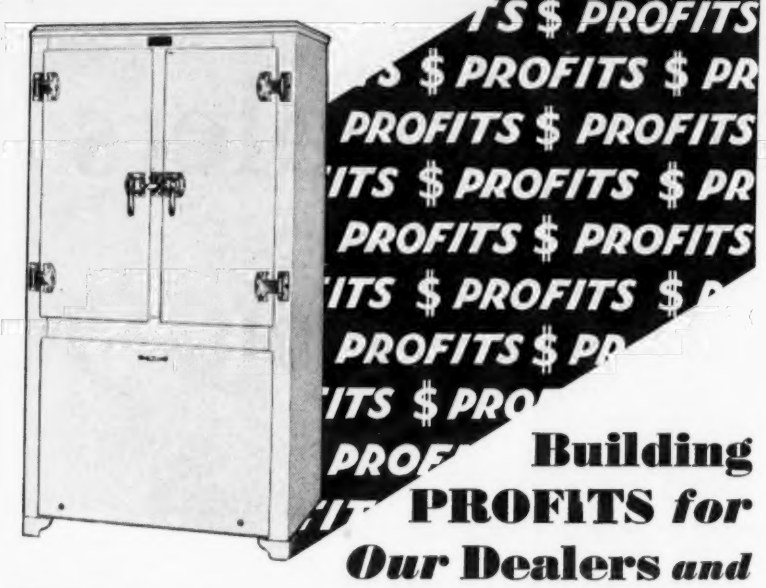


Kelvinator Water Cooler Model CW50—for direct connection to city water mains. Contains special cold storage compartment.

KELVINATOR SALES CORPORATION, DETROIT, MICHIGAN

KELVINATOR OF CANADA, LIMITED, LONDON, ONTARIO

KELVINATOR LIMITED, LONDON, ENGLAND



Building PROFITS *for* Our Dealers *and* Satisfaction *for Their* Customers

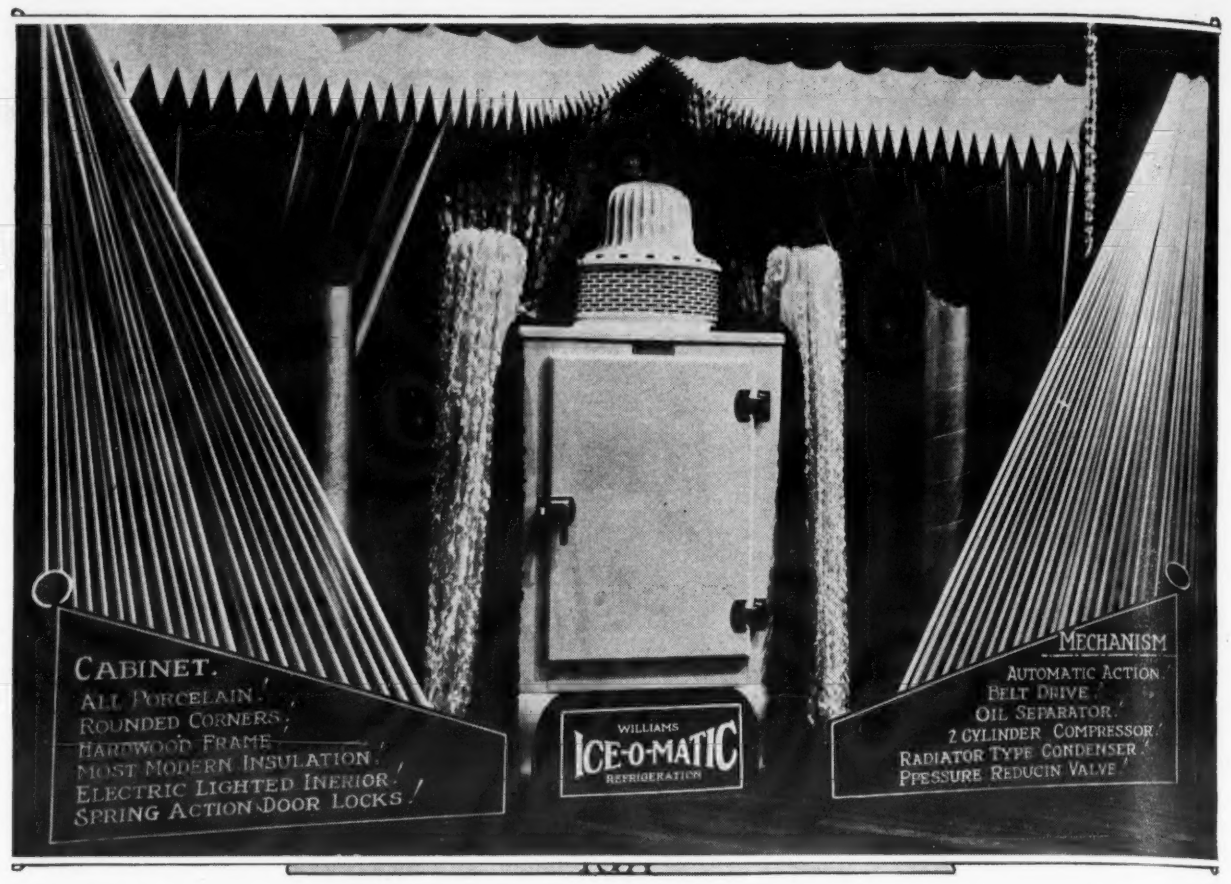
After all, the best co operation a manufacturer can give his dealers, is to deliver to them a product that is easy to sell and that gives complete satisfaction after it is sold.

At least, that's the way we feel about it. And that's the way most of our dealers feel. They have found through experience, the only kind of profit that remains in the bank is the profit coming from the sale of a product that requires a minimum amount of servicing. You'll find we have designed the Wayne with this fact in mind. The scientific design and painstaking construction of the unit is the foundation of the Wayne superiority. In addition, of course, there are innumerable other advantages. Exquisitely designed cabinets in a long range of color schemes. Each cabinet insulated with Dry Zero—but, let us send you the complete information on this profit building refrigerator. Write us today. We'll send you all the details, together with an outline of our proven Selling Plan.

THE WAYNE HOME EQUIPMENT CO., FORT WAYNE, INDIANA

WAYNE ELECTRIC REFRIGERATOR

Ice-O-Matic Makes Bow in Omaha



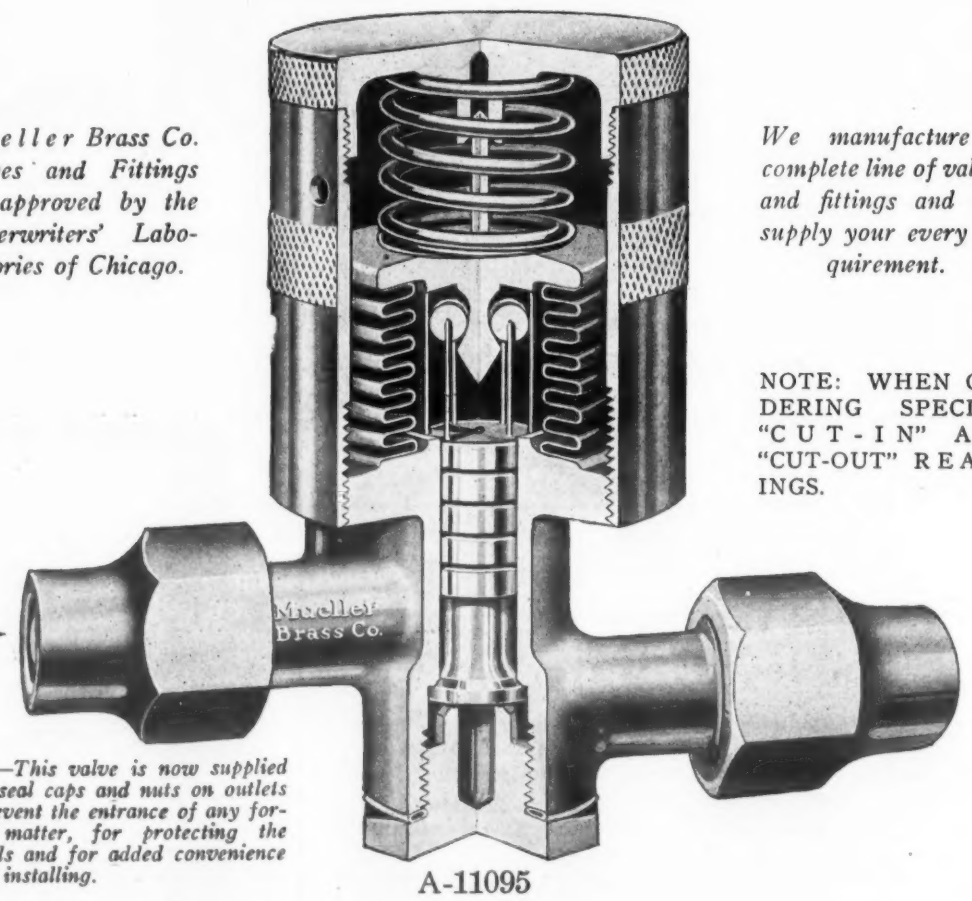
Omaha, Neb.—The Ice-O-Matic electric refrigerator has made its formal bow here through the Schmoller & Mueller Piano Co. Advertising in the daily papers and good window displays were a part of the promotional work the first week, or introductory showing here. To the South Omaha branch of the piano company was given the honor of making a fine window display. The photo here shows the Capitol model installed in the center of a window, 10 x 6 x 10 feet. The decorations used were white and black. The placards in either corner of the window gave some real information about the features and improvements in the Ice-O-Matic electric refrigerators.

R. B. Wilson is the manager of the South Omaha store and staged a formal opening on May 27. Four of the domestic models and two of the commercial units were sold the first week. In addition to that the branch house secured 2,000 names of home owners and the names of 175 potential prospects. One of domestic models was presented to one of the patrons of a local theater. Cards were filled out by all the patrons of the theater for one week. On these cards the name, home address, telephone number and an answer to the question, "Do you own an electric refrigerator?" were given.

Four people are used in the South Omaha branch of this piano company, and Mr. Wilson feels he now has enough potential prospects to keep all busy for three months. This company will use virtually the same selling methods heretofore employed in selling pianos and radios. Terms, so far as the South Omaha branch is concerned, will be 15% cash and seventeen equal payments.

MUELLER
Two-Temperature Control
SNAP VALVE

Mueller Brass Co. Valves and Fittings are approved by the Underwriters' Laboratories of Chicago.



We manufacture a complete line of valves and fittings and can supply your every requirement.

NOTE: WHEN ORDERING SPECIFY "CUT-IN" AND "CUT-OUT" READINGS.

Note—This valve is now supplied with seal caps and nuts on outlets to prevent the entrance of any foreign matter, for protecting the threads and for added convenience when installing.

A-11095

This valve is so constructed as to make it a real aid to the service man. By merely turning the outside knurled case he can raise or lower the temperature without danger of losing the differential which was previously properly set.

The differential is built into the valve and cannot be changed.

The temperature range may be changed without the necessity of a recheck or numerous visits of the service man.

Simplicity of construction insures a long and trouble proof life.

The snap action feature prevents seat erosion and assures uniform performance.

The body is a brass forging, thus making it seep proof and free from defects.

Mueller Brass Co.

PORT HURON, MICHIGAN

THREE GENERATIONS OF BRASS MAKING

Copeland Goes to the Theatre

A NOVEL enterprise to bring the name Copeland to the attention of thousands of apartment dwellers and home owners, was carried out by the Copeland Refrigeration Company of Chicago, managed by H. T. Kessler.

Through the co-operation of the Balban and Katz theatre management of Chicago, fourteen Model A-45 Copeland refrigerators, retailing at $215.00 each, were placed on display in the lobbies of an equal number of large neighborhood movie houses, where each patron was afforded a chance in a "Lucky Number Contest."

Each contest continued for a period of two weeks, public interest grew more intense as the time for the drawing drew near. In addition to an elaborate lobby display, trailer announcements, following the feature film, provided an opportunity for further publicity.

Results from the contest, according to Manager Kessler, were satisfactory. Every patron entering the theatre was given a double coupon, numbered in duplicate. One part he retained, the other filled out with the name and address was dropped in a box. In order to be eligible for the grand prize, it was necessary to answer one question: "Are you interested in purchasing an electric refrigerator this summer?"

Mr. Kessler estimates that when the contest closed, June 2, a total of 150,000 coupons had been turned in. A substantial percentage of those who gave their names and addresses indicated that they intend to purchase an electric refrigerator during the coming three months.

All coupons were classified as to districts, and prospects distributed to neighborhood Copeland dealers.

The photograph shows the display in the Sheridan Theatre, located at Sheridan Road and Irving Park Blvd.

DRY·ZERO

The MOST EFFICIENT PERMANENT INSULATION KNOWN

DRY-ZERO CORPORATION, 130 NORTH WELLS STREET, CHICAGO, ILLINOIS

DRY·ZERO

FOR QUALITY CABINETS

ELECTRIC REFRIGERATION NEWS

The Business Newspaper of the Refrigeration Industry

Published Every Two Weeks by

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Eastern Manager: H. A. DeLashmutt, 1950 Graybar Bldg., New York, N. Y. Phone Lexington 9113
Chicago Representative: F. W. Henkel, 306 S. Wabash Ave., Phone Wabash 6668

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VOL. 4, No. 21, Serial No. 97 — June 18, 1930

Confidence and Responsibility

A NEW job has been found for the electric refrigerator, a job that is a distinct compliment to a young industry. In the next column an advertisement is reproduced that was published last week in a number of prominent newspapers. It appeared on the financial page.

Its purpose was to convince readers of the financial sections of the newspapers in which it was printed that the securities of the group of public utilities responsible for the advertisement are good investments. Those companies sell many other electric appliances in addition to refrigerators, but they selected the refrigerator as the keynote for the advertisement, presumably because it carries with it an atmosphere of public acceptance that is invaluable in appealing for public support.

This advertisement is only one of many indications that the electric refrigerator, which was scarcely heard of a few short years ago, is taking a high place in public confidence. Few products in the history of American industry have made such rapid progress. It has found a welcome in more than 2,000,000 homes. And that really is only the beginning, for there are other millions of homes in which it will be welcomed just as enthusiastically in the next year or two.

With the confidence of the public comes responsibility to the public. Those in charge of the destinies of the electric refrigerator must keep that fact in mind and do all in their power to increase the measure of trust that has been so quickly and so generously accorded to their industry.

* * *

Back to Nature

MOST sales contests are suspiciously alike. A group of refrigerator salesmen suddenly find themselves embarked on some imaginary enterprise such as pursuing each other around the world in airplanes, or building a topless tower that has no material foundation, but is nevertheless supposed to stand up straight and dominate the countryside for miles around. The formula is always the same: they are asked to leave this mundane sphere for the clearer realms of imagination.

Down in South Carolina they have reversed the usual process. Instead of asking its refrigerator men to explore the fields of fancy, the Broad River Power Company did its own exploring before the contest began, and brought back from the ethereal regions something exceedingly definite and material for its men to struggle over. Up to a month ago, "getting your goat" was a purely mental and emotional process in South Carolina, just as it is everywhere else. Now, in the city of Columbia and the surrounding territory, the phrase has real substance. For the Broad River Power Company acquired a real live goat, and consigned it each week to the loving care of the lowest team in its refrigerator sales contest.

The details of the contest and the measure of success achieved are recorded on another page. There wasn't anything imaginary about the goat. He was real, and there are few animals more real than a goat. He appeals to at least four of the five senses, as the stragglers in the Carolina contest will testify.

At last reports the goat, appropriately named Jonah, was still alive and thriving. Possibly the Broad River Power Company will be willing to rent him to other sales organizations that have contests on their hands, and whose imaginations are at the point of exhaustion.

* * *

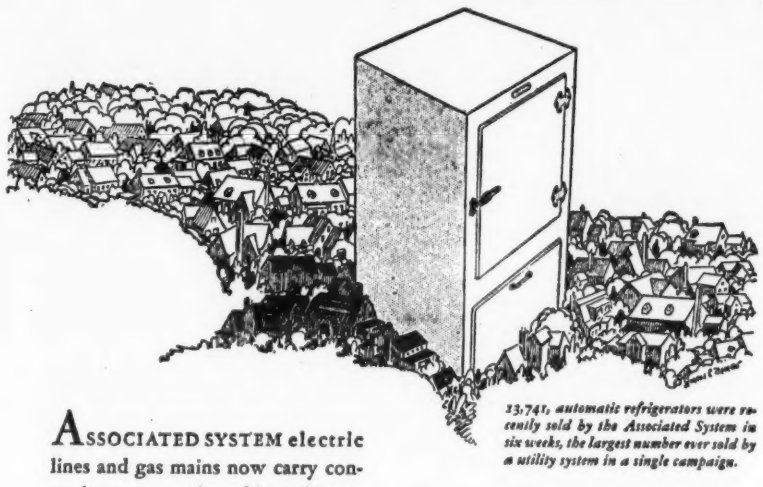
Sales Methods Discussed

METHODS of preparing a standard sales presentation are discussed by Richard C. Hay in an article which appears on Page 10 of this issue of the NEWS. Mr. Hay is a writer with a background of actual experience in business, and is the author of a widely used book, "Sales Management Fundamentals." He also is an associate editor of Sales Management.

The problems involved in the preparation and use of a standard sales presentation are of absorbing interest. A second article by Mr. Hay, which will appear in an early issue of the NEWS, will discuss the job of selling a standard presentation to the salesmen who must use it.

Boosting Refrigeration

13,741 *more homes*
now have the benefits of
Automatic Refrigeration



13,741, automatic refrigerators were recently sold by the Associated System in six weeks, the largest number ever sold by a utility system in a single campaign.

ASSOCIATED SYSTEM electric lines and gas mains now carry convenient automatic refrigeration to 13,741 additional homes. Employees sold this number of refrigerators, 230 carloads, to customers during a recent six weeks' campaign—more than twice as many as were sold by the Associated System all last year—more than were sold in the entire United States in 1922.

These 13,741 customers now have *greater health protection,* greater home comfort, greater convenience. Convenience is a watch word in the modern home. Electricity and gas supply it.

Year by year, the use of electricity and gas consuming appliances increases. During 1929 customers purchased appliances with a value of $6,016,535 from the Associated System.

1930 purchases were estimated at $8,221,000. $5,000,000 worth have already been purchased and the peak season is yet to come. This rapid increase in the use of appliances assures a future of greater convenience for customers and continued growth for the Associated Gas and Electric System, serving over 1,368,000 customers.

For the sake of health, comfort, and convenience neither your home nor your food stores can afford to be without some means of modern refrigeration.

Associated Gas and Electric System

61 Broadway — New York City

This Advertisement Appeared on the Financial Page of Large Newspapers

McELHINNY SEES BIG YEAR FOR COPELAND PRODUCTS

Mt. Clemens, Mich.—Though 1929 was the most successful year in the history of Copeland Products, Inc., orders being received in June will bring total orders for the first six months of 1930 close to the complete totals of the entire year of 1929, according to W. D. McElhinny, vice-president in charge of sales, who has just returned from a three months' tour of the country and the northwest Canadian provinces.

McElhinny's trip embraced all parts of the United States, and during it he contacted more than 4,000 Copeland distributors, dealers and salesmen and held 2-day sales meetings in Syracuse, Boston, Springfield, Mass.; Williamsport, Pa.; Philadelphia, Kansas City, Tulsa, Dallas, Fort Worth, San Antonio, New Orleans, Birmingham, Rochester, N. Y., Cleveland, Cincinnati, Lexington, Denver, Salt Lake City, Los Angeles, San Francisco, Seattle, Vancouver and Calgary.

"I found Copeland business thriving all over the United States," McElhinny stated. "Distributors are selling almost twice as much as last year. Dealers are in the same fortunate situation. Everyone reports his business at the peak, and with no signs of early diminution. It appears to me that Copeland during the first half of the year will do twice as much business as in the same period last year, and almost as much as during the entire year of 1929, Copeland's previous best year.

"I see nothing in the outlook to indicate any let-up in Copeland's business before the fall, as orders continue to come in at the rapid rate of the past several months. Meanwhile, we have very definite plans for our fall program. All indications are for an exceptional year for Copeland."

McElhinny attributes the unusual activity this year in the electric refrigeration industry to a number of factors. "The medium and larger income classes of our population, as a whole, were not seriously affected by last fall's stock market collapse, and they continue to be heavy buyers of necessary conveniences," he declared. "Another group is made up of persons who are making this an economy year, during which they will plan no replacement purchases of an auto, radio or wash machine, but have determined to complete their household conveniences by the addition of electric refrigeration. A third group, and this is an important one, is made up of prospective or present tenants of apartments, who are demanding electric refrigeration as a condition of their continued or impending tenancy, and whose wishes are being granted by the apartment owners. As a result of this, many old apartment houses and the majority of those under construction are being equipped with electric refrigeration.

"Copeland has shared in this high activity in an exceptional fashion. In addition to obtaining our rightful share of this fine business, we have enjoyed the benefits of an improved line, a very much enlarged field organization, and aggressive and fair sales policies, with the result that Copeland Sales outlets are securing a much greater volume of household and commercial business and profits are very satisfactory."

RUTHENBERG ANNOUNCES RECORD BREAKING SALES

Mt. Clemens, Mich.—According to a statement issued by Louis Ruthenburg, president of Copeland Products, Inc., May shipments from the new Copeland plant here exceeded the previous high record established in April, 1929, by 39.6%. Shipments for the month of May were 100.1% above shipments for May, 1929.

Receipt of orders during May continued at such high levels as to ensure the maintenance of heavy shipments during June. The number of unfilled orders on hand as of June 1 were 425% above unfilled orders on hand as of June 1st, 1929.

"Remarkable values, in combination with such Copeland features as ultra-economical operating cost, water chiller, accessible coldial, quick freezing, large ice-making capacity, quiet operation, electrically-lighted cabinets and locked machine compartments, have combined to bring about Copeland's record volume," said Mr. Ruthenburg.

"Commercial equipment for grocery stores, meat markets, florists and similar business establishments is an increasingly important factor in Copeland's volume."

DOHERTY SUBSIDIARIES REPORT GOOD BUSINESS

New York, N. Y.—The public utilities division of the Henry L. Doherty Co. reports that its subsidiaries sold 1,159 domestic and commercial electric refrigerators during the month of April. The sales for the first four months reached a total of 2,449 units.

Sales by the various companies are as follows:

Adrian	10	29
Bristol	36	72
Danbury	55	102
Durham	18	81
Erwin	4	12
Johnson City	29	67
Joplin	48	123
Sedalia	11	19
St. Joseph	130	247
Toledo	133	478
Toledo—Defiance	14	30
Toledo—Lake Shore	6	19
Toledo—Michigan	1	12
Ohio Public Service	437	726
Alliance	35	63
Ashland	18	41
Elyria	33	62
Lorain	63	109
Mansfield	44	74
Massillon	72	101
Port Clinton	20	29
Sandusky	50	99
Warren	102	148
Public Service of Colorado	227	432
Alamosa	13	29
Boulder	8	14
Brighton	3	5
Cheyenne	8	13
Denver	141	294
Fort Collins	8	10
Grand Junction	31	44
Leadville	1	2
Salida	3	5
Sterling	11	16
Total	1,159	2,449

CLEVELAND SALESMAN TURNS IN GOOD MONTH

Cleveland, Ohio.—Mr. Hitchcock, star salesman for Smith & Obey Company, Electrolux distributors, sold 25 refrigerators during the month of April single-handed.

O-695

Faster freezing—with the COLD CONTROL
Fresher vegetables—with the HYDRATOR
Greater beauty—with all PORCELAIN·ON·STEEL

*

No wonder Frigidaire is a 3 to 1 favorite!

3 times as many sold as any other make

Folks who own Frigidaires don't have to wait for ice cubes. They just turn the "Cold Control" to six and ice cubes begin to freeze *at once.* They can't help but freeze! For the extra-powerful mechanism runs the temperature down below zero—*fast.*

And Frigidaire users don't have to use covered pans or dishes for vegetables. For Frigidaire not only keeps vegetables fresh but goes a step further. By means of the Hydrator, Frigidaire actually makes wilted vegetables fresh again!

And here's another Frigidaire advantage. All surfaces can be kept clean and sanitary inside and out. For the finish throughout is a new, semi-flexible Porcelain-on steel—a material so smooth and durable that it won't scratch, peel, rust or blister.

But these are only a few of the reasons why Frigidaire is a favorite by a vote of 3 to 1. May we tell you more about it—and explain why it is paying extra dividends to dealers everywhere?

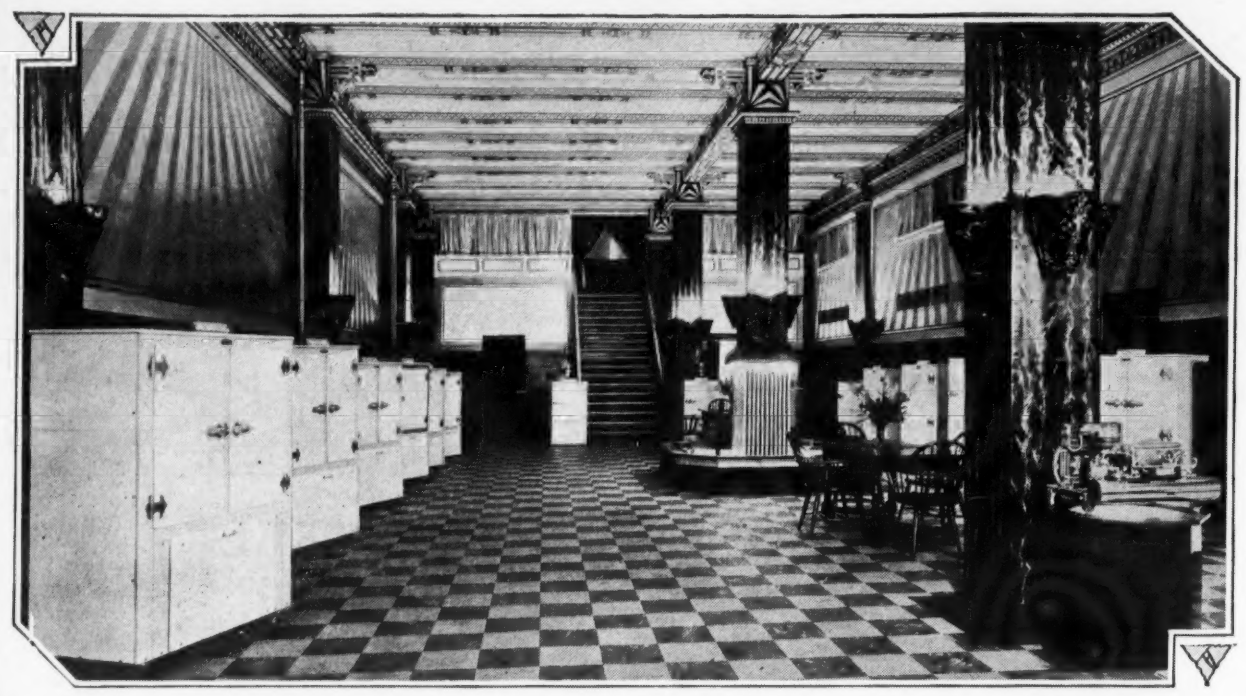
Write today for interesting information on dealer franchises.

FRIGIDAIRE CORPORATION, *Subsidiary of General Motors Corporation, Dept. M-23, Dayton, Ohio*

FRIGIDAIRE

More than 1,500,000 *in use*

Light Colors Suggest Coolness



THE advantages of a display room interior that has been carefully designed and beautifully executed are fully appreciated by those in charge of Frigidaire sales. Seventeen showrooms have been designed throughout the country to display these refrigerators in surroundings that will be inviting and at the same time will suggest coolness, cleanliness and attractive modernism. Designed by Beverly S. King, architect, these interiors are individually adapted to the plan of each showroom, but collectively they are uniform in their scheme of design and color.

White ceilings with aluminum painted beams form a cool contrast with light green walls panelled in a crisp combination of aluminum leaf and aluminum paint. Decorative designs on walls and ceilings are in black, in keeping with the black and white tile linoleum floor. Black-and-silver curtains are used in doorways.

The rays of each wall panel are of aluminum paint superimposed on a background of aluminum leaf, which covers the entire panel. The effect is more a contrast in texture than in color. As a result, the rays seem to suggest light itself rather than color.

These "light rays" perform the useful service of directing the eye of the visitor to the refrigerator on display. The entire color scheme of silver, green and black gives a powerful effect of coolness, while substantial relief has been introduced into the design decoration to afford a well-balanced whole. Against such a background the simple design of refrigerators finds an agreeable contrast.

The interiors are an object lesson in the skillful use of cool colors to suggest the nature of the product displayed. They also serve as models to demonstrate how decoration can display, and not smother, the merchandise.

STANDARD PRESENTATION

Its Success in Producing Sales Depends on Skillful Construction

By Richard C. Hay

ASK any salesman selling electric refrigeration whether he believes in using a standard sales presentation, and he will, in at least half the cases, tell you that he certainly does not—that a standard sales talk "cramps his style," and so on ad lib. And yet, if you follow any one of these salesmen who objects to a standard sales presentation, and listen in on his sales talk for a period of days, you will find that he is using practically the same argument over and over again, and that some days he will present them wonderfully well, whereas other days his presentation is weak.

In 1930 sales managers of dealers and manufacturers in the electric refrigeration field are coming to appreciate more and more how useful and profitable a good standard sales presentation can be in building up their sales of electric refrigeration. Always, wherever an organization has no standard sales presentation, the question comes up, "How can I build a presentation that will be practical and will bring in the business if my organization makes use of it?" This problem of doing the actual preparation of the standard sales presentation is certainly the most difficult part of the job. However, many successful specialty selling organizations have developed ways and means of building the standard sales presentation so that it will stand up under actual fire, and will bring in the business that we all want.

Nearly fifty years ago John H. Patterson of the National Cash Register Company built what was probably the first standard sales demonstration developed in this country. He used the method which has been used with success by many other organizations since that time, namely, making a record of the sales presentation of salesmen in his organization, and from those building a standard sales demonstration, which included all of the important arguments developed by salesmen in that organization. This original study of a standard sales presentation is described by G. E. Irving, of the Sales Educational Division of that Company, who says:

"Mr. Patterson visited 51 sales agencies in fifty days, had a stenographer take down the sales talk, and from all the material had a primer prepared. He then required all National Cash Register salesmen to memorize this primer. He was also the pioneer in holding sales schools."

McElhinny Tells How

This method of building a standard sales demonstration by consulting with leading salesmen in the company, is also illustrated by the method followed by a comparatively young organization, the Copeland Sales Company, distributors of Copeland electric refrigerators. This is described by W. D. McElhinny, vice-president in charge of sales:

"The presentation or album demonstration, as it is known with our company, was written after consulting with the leading salesmen in our organization as to the best method of presenting electric refrigeration, and the arguments that made the most appeal to the customer. Their approaches and sales arguments were compiled and worked into one story. Each point was illustrated."

Another successful organization which makes use of a standard sales presentation is the Estate Stove Company. This company makes use of this same method in building their presentation, as described by Wayne Calhoun, now vice-president of the Proctor & Collier Company, and formerly sales manager of the Estate Stove Company:

"While with the Estate Stove Company I prepared four standard sales presentations, which were used by Estate Stove Company representatives during the four consecutive years that I was in charge of sales there. This material was gained from two sources:

"1—By my personal work with our most successful salesmen in the field. During such trips I made notes of the points most frequently emphasized by these salesmen during their interviews with prospective buyers. I ranked these points in order of their importance, seeking to evaluate them in the order of their relative strength in influencing buyers to exchange their money for products made by the Estate Stove Company.

Classifies Arguments

"2—Early each fall I sent to every Estate salesman a complete detailed questionnaire, which included every known sales argument on behalf of Estate products. I asked each sales representative to rate these arguments, one, two, three, and so forth, in the order of their importance in his experience. I also asked that each salesman set forth how he had developed each one of these points in his personal interviews."

A more scientific method of building a standard sales demonstration is illustrated by the method followed by the Studebaker Corporation of America in building its standard sales demonstration. This method, known as the difficulty analysis method, involves as a first step the determination of the difficulties the salesman meets with in closing a sale. A study of methods in use by successful salesmen in the organization for solving these difficulties, when compiled and codified and properly evaluated, serves as the foundation for the standard sales demonstration.

David R. Osborne, training director of the Studebaker Corporation, describes this process as followed by his company:

"Our procedure in building up the wholesale and retail presentation has been just about the same in principle.

"Our first step is to make a careful analysis of the things the salesmen in either case have to do.

"Then we go into the field and interview salesmen regarding their difficulties with each of the duties—continuing

(Concluded on Opposite Page)

Convince yourself that WILLIAMS ICE-O-MATIC will make you more money

YOU KNOW MECHANICS

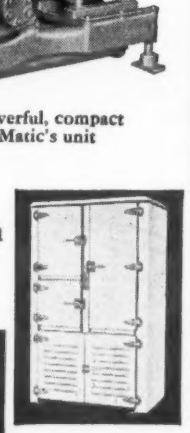
—Examine this new Williams Ice-O-Matic. The line is complete with compressors from 1/6 to 1½ H. P. Convince yourself that this quality-built unit will give better electrical refrigeration. Test its reserve cooling ability. Compare these roomier cabinets with hardwood frames that separate interior and exterior porcelain. Make your own tests of insulation and refrigeration efficiency. Let your own test kit be our Williams Ice-O-Matic salesman. Let its accurate readings show you that Williams Ice-O-Matic is carefully built to protect your profits.

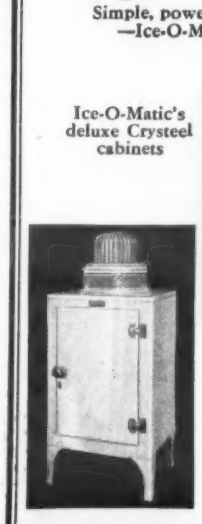
YOU KNOW MERCHANDISING

—Think of the added money to be made with the protection of an exclusive direct-factory franchise on this nationally advertised and nationally recognized Ice-O-Matic. This Williams line offers you complete coverage of the electrical refrigeration field from a 4.7 cu. ft. domestic cabinet that lists at $175 to commercial installations. Williams offers you practical sales help on profitable merchandise.

Simple, powerful, compact —Ice-O-Matic's unit

Ice-O-Matic's deluxe Crysteel cabinets





New low priced Capitol model. Sealed unit for top, inside of lower compartment of cabinet

GET THE FACTS ON WILLIAMS ICE-O-MATIC

—Wire or write for a demonstration machine right now. Put it on test side by side with any other make. Convince yourself that the Williams Ice-O-Matic is the one to sell.

Ice-O-Matic Division

WILLIAMS OIL-O-MATIC HEATING CORPORATION

Bloomington, Illinois

RADIO—*Williams Oil-O-Matics*—SUNDAY EVENING, 7:30 to 8:00 (Eastern Daylight Time) NBC Chain, WJZ, WBZA, WBZ, WLW, WHAM, WJR, WGN, KWK, WREN, KOA, KSL.

WEDNESDAY EVENING, 7:30 to 8:00 (Eastern Daylight Time) KDKA.

SATURDAY EVENING, 8:00 to 8:30 (Pacific Time) KFRC, KMJ, and KHJ.

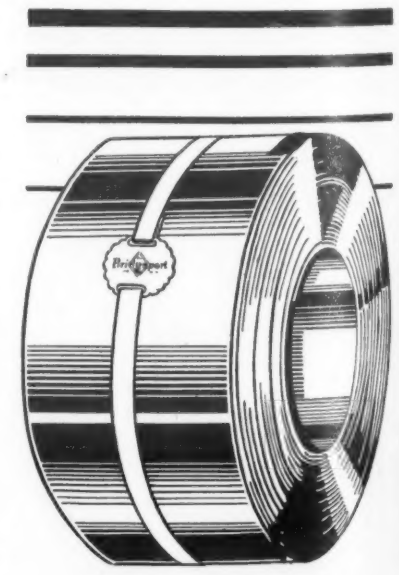
WILLIAMS OIL-O-MATIC HEATING CORP.
Bloomington, Ill. ERN-6-30
Please explain Williams Ice-O-Matic and the Williams Franchise.
Name .....
Address .....
City and State .....

"Bridgeport" TRADE BRASS MARK

Sheet Brass Made Under Laboratory Control

Knowing the various brass and bronze alloys as they begin their existence in our electric melting furnaces and watching their development through the progressive rolling and annealing stages, we are in a position to observe the natural aptitudes and special qualifications of each alloy and to know what they can do when on the job.

To meet the demands of modern high speed manufacturing requirements — severe forming operations and deep draws on thinner and thinner metal—fine smooth surfaces so necessary for rapid and economical finishing—we have developed brasses of the correct temper, grain size and surface.



Brass Mill Products and Fabricated Articles to Order

Bridgeport Brass Company

Bridgeport, Connecticut

New York Philadelphia Chicago Cleveland Detroit Boston Louisville Buffalo Newark Providence Dayton Pittsburgh Syracuse

MUST BE WELL PLANNED

(*Concluded from Opposite Page*)

the interviews until no new difficulties present themselves.

"In the case of retail investigations, we also go into a large number of retail establishments as prospects and record the actual procedure of salesmen on the job.

"After finding the difficulties involved, we go over those carefully and make a list, which includes no duplication; then we go to the best men we can find and get their experience in overcoming these difficulties.

"With these in hand, we arrange a logical presentation of our story and use the information secured from the field as a base for every part of the presentation.

"Our plan does not include having the retail salesman learn a sales talk, but rather works on the basis of a planned order for the presentation, giving the salesman plenty of latitude for building up his own story regarding each section.

Application Depends on Dealers

"In connection with our retail sales course, we provide an examination or test for sales managers or dealers to use in determining whether salesmen have an intelligent understanding of the plan we recommend and whether they are using it. Of course, the application of this test is very largely in the hands of the local dealer, or local sales manager."

The difficulty analysis method was developed by Dr. W. W. Charters, formerly director of the Research Bureau for Retail Training at the University of Pittsburgh, and now at Ohio State University. It has been used with great success for developing courses to be used in the training of salesmen, and its use in the development of a standard sales presentation by the Studebaker Corporation has resulted most successfully for that company.

It is interesting to note some of the details of the work done by the Studebaker Corporation in making a difficulty analysis for building their sales training course. This is described by Mr. Osborne, who says:

"We had previously used another method, based on the same principle in the preparation of our first sales training course, but the difficulty analysis as developed by Dr. Charters is the simplest and most easily applied method which we have ever used.

"In the preparation of a factory salesman's manual a year and a half ago, we found a total of 787 'difficulties' in interviewing about thirty men.

Difficulties Boiled Down

"After being boiled down and eliminating and consolidating these 'difficulties,' where the same idea was stated in two or three different ways, we got a list of sixty-one.

"From this list, in turn, we selected thirty-one which were of major importance, and interviewed or submitted a questionnaire covering the questions to every man in our sales organization.

"The result was a very valuable source from which to draw material for various phases of our training work."

In other words, the difficulty analysis as carried out by the Studebaker Corporation of America, in addition to laying the foundation for the sales training of that company, also enabled them to build a successful standard sales demonstration.

In building a standard sales demonstration, it is essential that every difficulty with which the salesman meets in closing a sale be located and that the best answers to that difficulty be recorded. By listing the best solutions for every difficulty, the best method in which to present the point, a sales presentation can be built that will take account of the sequence of selling arguments found to be most successful, will anticipate at all times interruptions, objections, and questions that may come from the prospect, and thereby avoid in large measure the usual cross-fire and cross-questioning that takes place in the average interview.

The standard sales demonstration, built as a result of a thorough study in the field, of methods followed by successful salesmen, memorized by the sales organization, and then applied by that sales organization as their judgment and personality dictate, will certainly produce better results than the old hit-or-miss methods of selling now in use by so many organizations in this country.

Lindsay Quarters Elaborate

NEW display room opened by the Lindsay Automatic Refrigeration Co., distributors of Frigidaire, at the corner of Mason and Milwaukee Streets, Milwaukee. It is elaborately furnished, the color scheme being of green, black and silver.

Below the salesroom, in the basement, there is a salesmen's school room, a section for the display of commercial models and a kitchen, where demonstrations will be given. The Lindsay Co. has employed a home economics expert, Mrs. Waterstreet, who will carry on the demonstrations.

It is expected that the demonstrations by Mrs. Waterstreet will have much to do with increasing the Frigidaire sales in Milwaukee. Lectures will be given on the proper methods of preserving foods in the home and how mechanical refrigeration fills this need. Advice will be given on the preparation of desserts and other frozen dishes.

The Hard Luck Salesman

9:11—Looked over racing results.
9:46—Stopped to see show window circus, put on by lady advocating hair tonic.
10:45—Held curbstone conference with old acquaintance.
10:37—Helped one thousand other people watch messenger boy feeding pigeons.
11:00—Called on prospect. No luck.
11:02—Had measure taken for new pipe.
11:30—Phoned my favorite boyish bob. Closed big deal for Saturday night.
12:18—Went to see about automobile batteries.
12:45—Time out for lunch.
2:10—Called on prospect. Can't afford to buy.
2:15—Joined group watching man put on new tire.
2:33—Called on prospect. No one home.
2:34—Caught trolley for ball park.
3:00—All set for a big game.
3:45—Saw the Babe hit a homer.
4:51—Quit for the day. Lotta hard work. No luck.

—*Electrolux Refrigerator News.*

COPELAND'S CALIFORNIA DEALERS MEET AT SAN FRANCISCO

San Francisco, Calif.—In conjunction with its exclusive California distributor, Domestic Specialties Co., Ltd., the Copeland Sales Company recently held a dealer convention at the Hotel Whitcomb, San Francisco, and the many Copeland dealers present reported good business and predicted an excellent year for Copeland in California. David S. Spector is the president of the Domestic Specialties Company, and maintains offices in the Rialto Building, San Francisco, and in the Chamber of Commerce Building, Los Angeles.

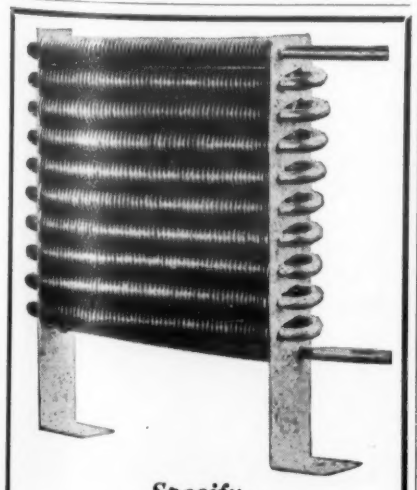
WINGFIELD REFRIGERATING CO. ORGANIZED

Augusta, Ga.—The Wingfield Refrigerating Co., of 817 Broad St., has recently organized to take over the Frigidaire agency formerly held by the Southern Electric Co., which has gone out of business. R. W. Wingfield is president of the new concern and "Joe" Mathewson and "Donny" Bussey, formerly with Southern Electric Company as salesmen, are with the new concern.

PIONEER FURNITURE STORE ADDS REFRIGERATORS

Portland, Ore.—The Ira A. Powers Furniture Company, which recently completed 64 years of successful merchandising in Oregon, has been named as distributors for Kelvinator refrigeration, the appointment having been made by Gordon J. Malone, Pacific Coast district manager for Kelvinator.

J. S. Sayre, sales manager for Kelvinator, held two successful sales meetings recently with Kelvinator representatives at Seattle and Portland.



Specify
ROME CONDENSERS
Made of heavy gauge deoxidized seamless copper tube. One piece construction.
Designs for all requirements.
Rome-Turney Radiator Co.
ROME, N. Y.

"*It was built by* BOHN"

The handy base cabinet may either be used for refrigerating machinery or the storage of cooking utensils, canned goods, vegetables, etc.

The name BOHN is our warranty that the finest materials obtainable have been utilized by skilled craftsmen and refrigeration engineers to build for you this beautiful and scientific product—an all-porcelain BOHN refrigerator.

BOHN installations include many of the leading hotels, restaurants and hospitals in America.

BOHN refrigerators are used exclusively on all Pullman-built railway dining and buffet cars.

The United States War Department has purchased hundreds of all-porcelain BOHN refrigerators for our army barracks and battleships.

In choosing BOHN refrigerators, discriminating home owners throughout the country have given BOHN a representative list of which any manufacturer might be proud.

Write for details of the remarkably low prices that are now prevailing.

BOHN REFRIGERATOR COMPANY
SAINT PAUL, MINNESOTA

The NEW PENN Type 'J' UNIT CONTROL for Electric Refrigeration Systems

NOW, only one control is needed for your electric refrigerator—The New Penn Type J. It performs the separate functions of several switches and with one dial gives complete control. Its movement, in half circles, provides outside temperature selection to suit manufacturer's specifications without altering the original factory setting. It is also used for starting and stopping when defrosting or resetting the switch if the thermal overload protector has opened the circuit. In addition to the above features, Type J is equipped with a differential and range adjuster.

With Type J, you'll always have adequate motor protection. The thermal overload protector is designed to compensate for changes in room temperature, and it is impossible to close the circuit manually by means of the unit control dial until the thermal overload protector has cooled for resetting.

Surely here is one control unusually suitable for domestic units. It is compact, attractively finished in a Bakelite case of high dielectic strength, practically air tight and vapor proof. It is quickly accessible and easily mounted. It reduces installation costs because it is equipped with bayonet type contacts which eliminate the necessity of entering the switch. The mounting, too, is decidedly simple and handy, and may be done quickly. Rated for a maximum of 1/3 H. P., A. C. or D. C., and may be secured in a variety of models to meet all domestic refrigeration requirements, and special applications. We will gladly send you more detailed specifications on request.

PENN ELECTRIC SWITCH CO.
DES MOINES, IOWA

In recognition of the superior design and performance of Penn Controls, many of the largest nationally known manufacturers of electric refrigerators have adopted them as standard equipment.

Japanese Visitors Confer With Kelvinator Heads

Left to right—K. Hirayama, R. Masaki, A. Ouchi and Y. Yanagisawa

See How American Refrigerators Are Manufactured

Detroit, Mich.—A. Ouchi, formerly rear admiral of Imperial Japanese Navy, and now managing director of Mitsubishi Denki Kaisha, and director of its subsidiary, Ryobi Denki Shokai, Kelvinator distributor at Tokyo, was a visitor to the Kelvinator factory recently. Admiral Ouchi, who gained fame in engineering, was accompanied by Y. Yanagisawa, Kenzaburo Hirayama and Ryoichi Masaki, all engineers of prominence in Nippon.

Mr. Yanagisawa sailed for Japan recently, and on arrival will become manager of the Kelvinator division of Ryobi Denki Shokai. He is a graduate of the Imperial University at Tokyo, and has spent several years in this country, with occasional return trips to Japan, as the American representative of Mitsubishi Denki Kaisha. His place in this country will be taken by Mr. Hirayama, an attache of the same company who speaks excellent English and is familiar with American sales and business methods.

Mr. Masaki is director of engineering of the Mitsubishi interests at Tokyo. This company composes the wealthiest group of varied banking, commercial, manufacturing and distributing interests in the Empire of Japan.

They were guests of President Mason and the executives of the export division, who entertained them at luncheon. A tour of the plant, under guidance of Messrs. Wilcox and Conroy of the export division, proved most interesting to these men, whose engineering training has given them a proper conception of efficiency in manufacturing methods.

ELECTROLUX AUGMENTS FIELD ORGANIZATION

Evansville, Ind.—Several new appointments in the field organization were recently announced by Electrolux Refrigerator Sales, Inc. J. W. Baird, formerly with the Servel Sales organization, has been appointed Electrolux district manager, assisting A. W. Grossman and H. M. Gallager, zone supervisors. Mr. Baird will maintain headquarters at Greensboro, N. C.

Frank P. Shea, also a member of the Servel organization, has been assigned as district manager, assisting C. A. Miller, Electrolux zone supervisor with headquarters in Chicago. J. W. Slowe, formerly with A. Baldwin & Co. of New Orleans, has been appointed as special sales and service representative.

MAJESTIC DISTRIBUTOR SUFFERS FIRE LOSS

Middletown, Conn.—Blau's Electric Shop, 475 Main Street, Majestic refrigerator distributors for Middletown and environs, was damaged by fire June 6. The blaze, which started in a wooden locker in the shop's workroom, caused damage estimated at $2,500.

FAR EAST IS BECOMING REFRIGERATOR CONSCIOUS

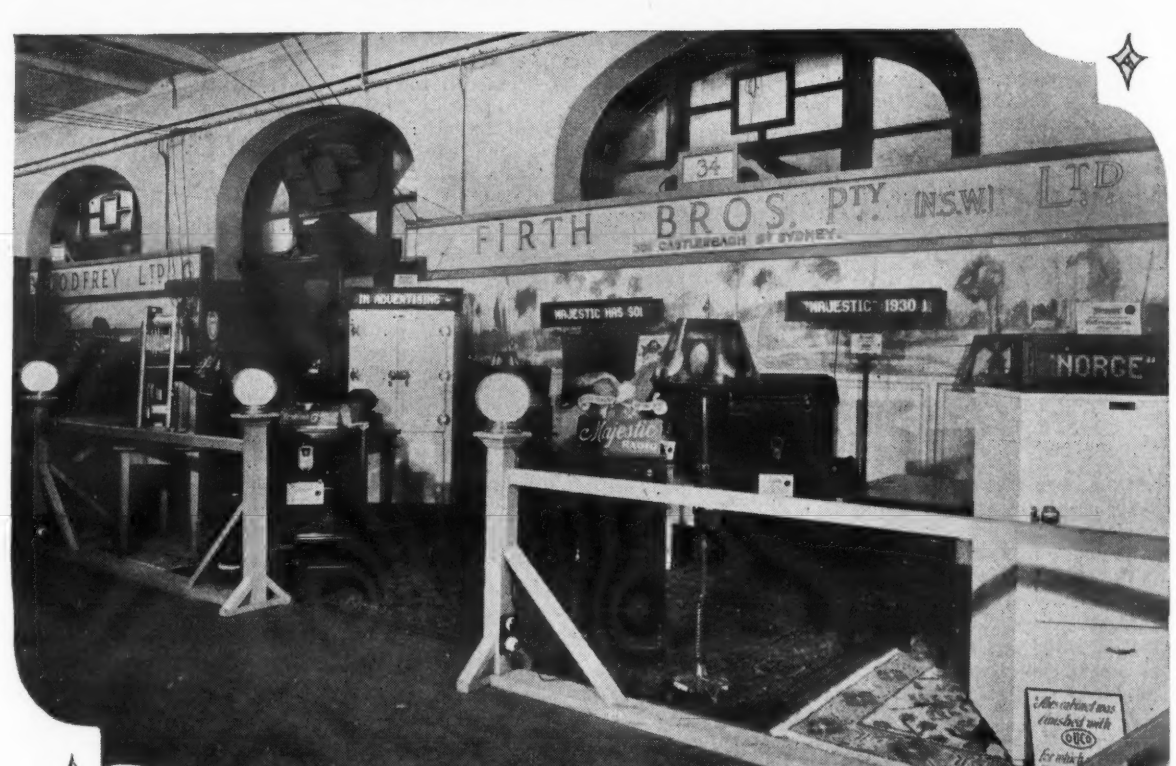
Cleveland, Ohio—The Far East is becoming conscious of the value of electrical appliances in the home—and especially the electric refrigerator—according to Edward C. Fox, of International General Electric Co., Inc., who is sailing for that part of the universe after visiting General Electric factories, offices and distribution centers throughout the United States.

"When China settles down, that country will offer great opportunities for the sale of electrical devices," he said while visiting the electric refrigeration department of the General Electric Co. "In Tokio now a very fine job is being done. The Tokio Electric Company now is set up to handle deferred payments."

Mr. Fox, who is a special representative of the appliance division, will cover China, Japan and the Philippines. He probably will have his headquarters at Shanghai. He previously spent two years in Tokio with James Stewart & Company, New York City contractors, who constructed the new $8,000,000 Mitsui Bank Building in the Japanese capital.

"We are not surprised that the parliament of Iceland, celebrating its anniversary this month, has existed for 1,000 years. Everything keeps better in a cool climate."—*Detroit News.*

New Norges Make Auspicious Showing at Australian Exhibition



FROM Detroit to Melbourne, Australia, is a far cry even in these days of rapid transportation, but Firth Brothers Pty., Ltd., of that Antipodean city, already report a remarkably enthusiastic reception of the Norge 1930 models. The photograph shows a section of the Firth Brothers booth at the Radio and Electrical Exhibition at Sydney, New South Wales. The Norge "Cutaway" in particular created quite a lot of attention; and criticism was very favorable both to the beauty of the cabinets and the ingenious simplicity of the Norge Rollator or cold-making unit. Australian orders are being filled as rapidly as possible, but many buyers will have to await the next large shipment.

Fulco

REFRIGERATOR COVERS

"FULCO" covers are used by those dealers who realize the importance of making deliveries in perfect condition—without scratches or broken enamel. For they know that complaints mean dissatisfied customers and loss of business.

"FULCO" covers are a real service feature that helps sales and holds trade.

Substantially constructed, heavily padded, box-shaped, providing perfect protection.

Give us the dimensions of your refrigerators, and let us quote special prices on your individual needs. Write our nearest house.

ON AND OFF IN A JIFFY

Fulton Bag & Cotton Mills

Manufacturers Since 1870

ATLANTA · NEW ORLEANS · DALLAS · ST. LOUIS
MINNEAPOLIS · BROOKLYN · KAN. CITY, KAN.

THE SHAFT ROTATES WITH THE SHAFT ROTATES WITH THE SHAFT ROTATES

Style No. 2 Cooke Seal Ring

Each Month Its Savings Become More Obvious

The more electric refrigerators sold, equipped with Cooke Seal Ring, the more do manufacturers and distributors realize how definitely its presence in their machine saves them money.

It is leak proof. The most volatile refrigerant cannot get by its smooth-running ground joint. Not only does it do away with leaking refrigerant but, on other machines not Cooke-equipped, it enables dealers to repair, on the job, with a minimum of time and labor, worn-out packing or other types of seals.

Cooke Seal Rings don't leak, squeak or overload the motor. First cost is their only cost and they last indefinitely. Use the coupon now.

COOKE Seal Ring

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Please tell me more about Cooke Seal Rings.

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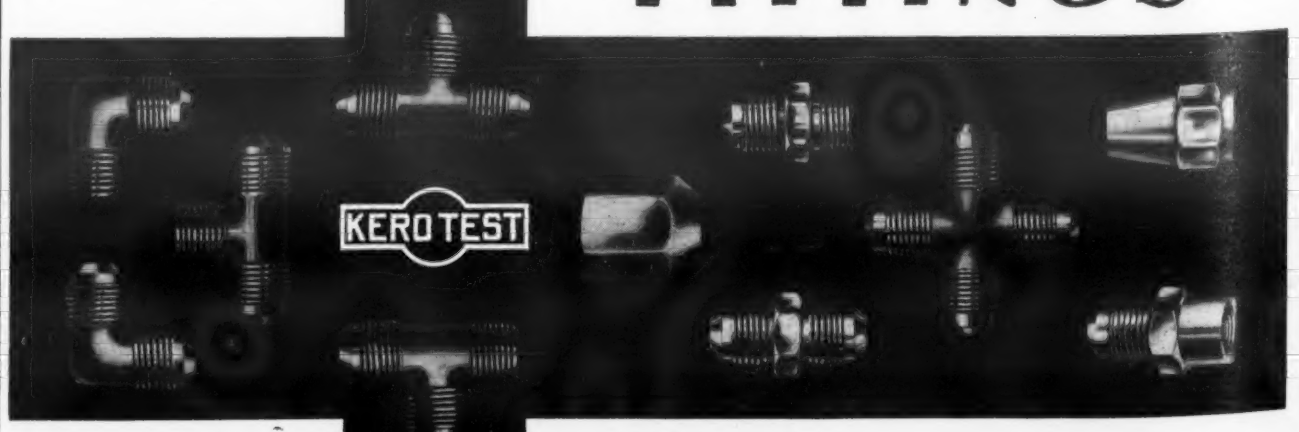
Address.....

City.....State.....

KEROTEST

FORGED BRASS FITTINGS

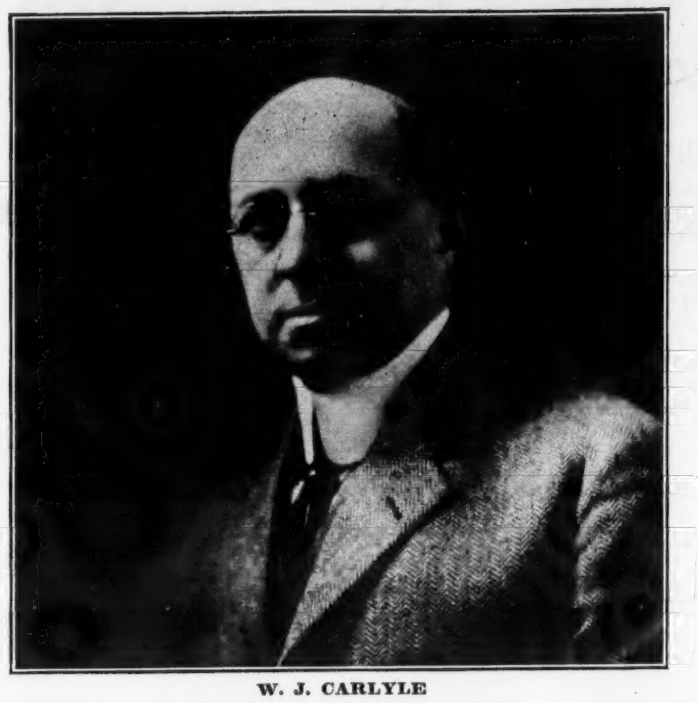


The Kerotest line of Brass refrigerator fittings is most complete—a size, shape and type for your every purpose.

Write for complete, illustrated Bulletin giving sizes, description and prices.

KEROTEST MANUFACTURING COMPANY
PITTSBURGH, PA.

Absopure Elects New Officers

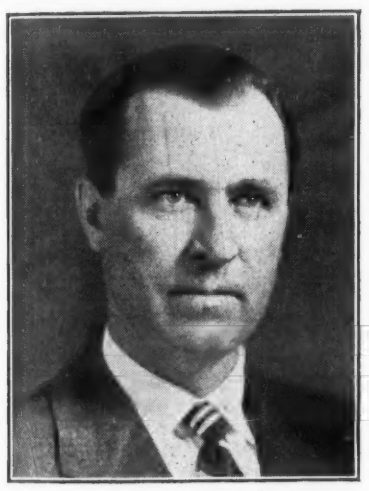


W. J. CARLYLE

N. M. GROSS

H. M. BROWNE

H. C. HAYES



J. H. NUGENT

T. S. PENDERGAST

Y. G. SMITH

(Concluded from Page 1, Column 4)

usually large number of Absopure refrigerators have been sold recently in the smaller towns and cities.

Joshua S. Sarasohn, sales manager, has just returned to Detroit after spending several weeks visiting Absopure dealers and distributors in Eastern states. He reports the outlook for refrigeration very bright and finds that radio dealers are very enthusiastic over refrigeration.

A list of the Absopure distribution outlets follows:

CALIFORNIA—Chanslor & Lyon Stores, San Francisco and Los Angeles.
COLORADO—Rocky Mountain Radio Corp., Denver.
CONNECTICUT — Home Necessities Corp., Waterbury.
FLORIDA—J. C. Brown, Gainesville.
INDIANA—Lighthouse Electric Co., Gary.
ILLINOIS—Coats Garage, Aurora; R. G. Jones, Springfield; A. E. Strang, Waukegan; Ideal Heating Co., Chicago.
IOWA—M. V. Jones, Davenport.
MICHIGAN — Ernst Kern, Detroit; Morley Brothers, Saginaw; Boot & Co., Grand Rapids; Nottley & Kolts, Port Huron.
NEW JERSEY—A. Tewelles, Jersey City.
NEW YORK—Weed & Co., Rochester and Buffalo.
OHIO—The Tracy-Wells Co., Columbus.
PENNSYLVANIA—The Fromar Company, Harrisburg; Superior Auto Accessories Co., Pittsburgh.
SOUTH CAROLINA—M. Vann, Greenwood.
RHODE ISLAND—Marsden's Store Fixture Co., E. Providence.
VIRGINIA — W. Morton Northen, Richmond.
WEST VIRGINIA—Diamond Department Store, Charleston.
CANADA—G. A. Vandry, Quebec; Whittaker Fireplaces, Windsor; Arctic Ice & Fuel Co., Winnipeg.

PRECISION

TUBE CUTTERS—FLARING TOOLS

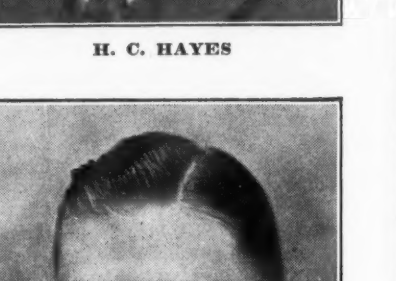
RESEATING TOOLS

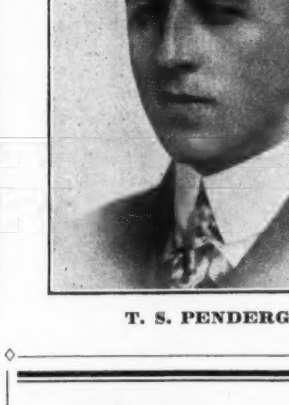
NEW—BETTER—FASTER

A flaring tool that spins out the tube to a soft flare and then burnishes it to a polished surface and a perfect fit with male seat. This is accomplished by three hardened rollers. Four hardened jaws in two pieces are a part of each tool.

AUTOMATIC FEED TUBE CUTTER FOR COPPER TUBING

This Copper Tube Cutter, with automatic pressure feed spring, is in a class by itself. Tubing is cut quickly and cleanly, without flattening or threading tube.





Leaky flared tube joints are frequently the result of marred male ends of fittings or non-concentric threads and seats. A great deal of time and money can be saved by using a properly designed reseating tool for defective valve or fitting ends. A hardened 7-tooth cutter will quickly reseat or reface a fitting. Any size from ¼" to ⅝".

Manufactured by
C. M. SMILLIE & CO.
520 E. LARNED ST.
DETROIT

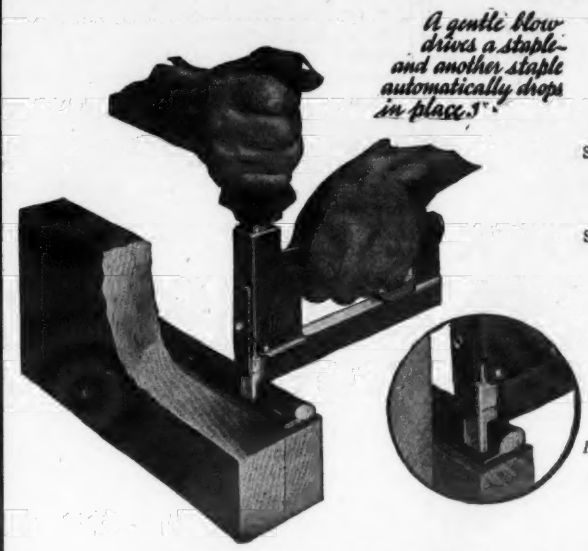
E.T.L. Service for Domestic and Commercial Electric Refrigeration

Testing and experimental laboratory service for Manufacturer, Distributor, Central Station—
Test data exclusive property of client.

ELECTRICAL TESTING LABORATORIES
80th Street and East End Avenue, NEW YORK CITY, N. Y.

GASKET QUICKLY APPLIED

A gentle blow drives a staple—and another staple automatically drops in place.



SHIPPED ON 10 DAYS' TRIAL

Should be in the tool kit of every installation man, service man, repair man.

8 TIMES FASTER—MORE SECURE

Ideal for tacking shipping tags and wherever tacks are used.

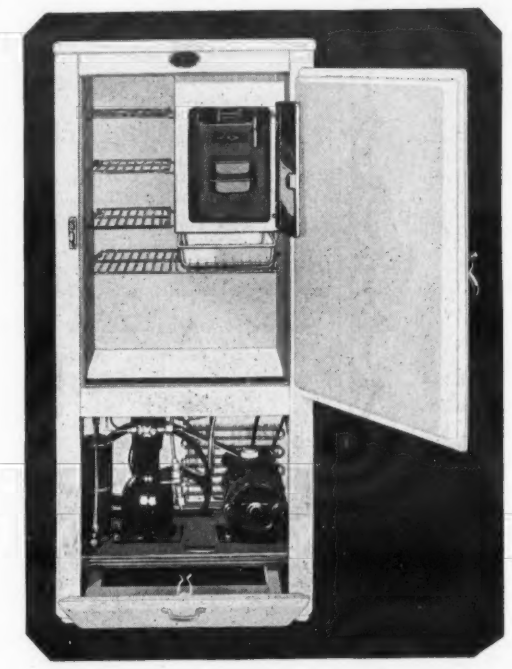
MARKWELL NO. 176, AUTOMATIC REFRIGERATOR TACKING MACHINE, $7.50 EACH

STAPLES PUT UP 5,000 TO A PACKAGE

176 "B" Steel, per pkg.....$2.75
176 "BC" Copper, per pkg... 3.75
176 "BTC" Copper, tin plated, per pkg.....$3.25
176 "BM" Monel, per pkg..... 5.50

PRICES ON STAPLES IN QUANTITY ON APPLICATION
Prices are F. O. B. New York

R. N. E. MARKWELL MFG. CO. INC.
200 HUDSON STREET NEW YORK, N. Y.



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a fast selling
Universal Cooler

PROSPECTIVE purchasers are immediately impressed by the pleasing lines, porcelain interior, satin finish hardware, temperature control and well planned shelf area of the Leader—and their interest increases to the point of an easy sale when the dealer draws their attention to its surprisingly low price, convenient size, and the fact that it is self-contained and is shipped completely assembled, ready to be plugged into any light socket.

Complete information on request.

Universal Cooler Corporation
Detroit, Mich. - - - Windsor, Ontario, Canada

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CONDENSERS
Full Capacity

With Every Unit

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HANDY & HARMAN
Silver Solders
QUALITY SERVICE

SALES VALUE
of
Silver Brazing

If you can announce, truthfully, that joints and connections in your refrigerators are permanently gas-tight, because brazed with

"HANDY" SILVER SOLDERS

you have an important sales argument.

Silver solders flow freely, penetrate instantly and make sound, leakless joints. Their great strength and ductility give them unequalled resistance to vibration and shock.

Silver solders also resist the corrosive action of refrigerants, or of the atmosphere.

Send for Bulletin No. 3ER which is very useful to refrigerator manufacturers.

Handy & Harman
Executive Offices: 57 William St.
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precision built

Specializing in
Refrigeration Compressor
Eccentric
and
Crank Shafts

Made to your specifications. Send us your blue prints — we'll send you our prices.

Modern Machine Works, Inc.
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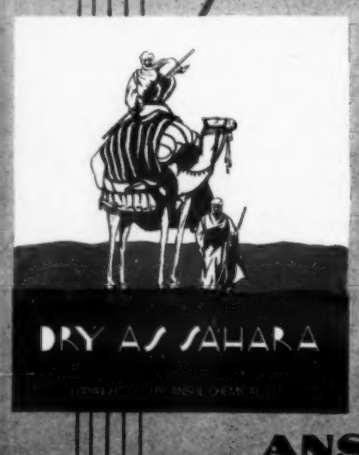
DRY DRIER DRIEST
SULPHUR DIOXIDE
for Direct Charging



"Ansul" Sulphur Dioxide is scientifically dried through a four stage dehydrating system, each stage being composed of three units in series. Absolute manufacturing control is maintained throughout.

Also ton drums and tank cars

Every Cylinder Analyzed Pure Bone Dry

ANSUL CHEMICAL CO.
MARINETTE, WISCONSIN

An Efficient Service Man Makes a Satisfied Customer

T. S. Pendergast
Director of Service
Absopure Refrigeration Corporation

SOME changes have been made in the procedure of handling Detroit service calls. The changes are made in an endeavor to render more satisfactory service to our customers, improve the operation of Absopure machines, reduce repeat service calls, and increase the revenue of the local service department.

Our contact with our customers is almost entirely through our service man. This contact should be friendly and cordial. Users of Absopure equipment are our customers, and they should always feel that we are interested in the operation of their machines and anxious to please them. This applies to telephone conversations with them and personal interviews—whether servicing machines or collecting accounts.

It must be remembered by all members of the local service department that when a customer calls, it is because his machine is out of order, and he is likely to be irritable about it. Do not argue or get angry. Show friendly interest and a willingness to serve. We must please our customers. We want them to be well satisfied with Absopure equipment and Absopure service. All employees of the local service department will give thought to the above, and see whereby they can improve their present mode of dealing with customers.

Some of the faults that can be corrected in the local service department are as follows:

1. Too many "check back" service calls.
2. Too many customers disputing the payment of service bills because they claim the service man did the machine no good.
3. Too many customers repeating stories told them by the service man as to why the equipment would not work.
4. Necessity of adjusting service bills before the customer will pay them.
5. Last—and by no means least—is lack of revenue from local service.

Service Calls

The charge for local service is at the rate of $2.00 an hour—with a minimum charge of $2.00 for a service call. This is a fair and reasonable charge, providing the work is satisfactorily done.

Service on Household Equipment

When making a service call on a household machine, the service man will do the following things in all cases:

1. Locate the cause of the trouble and remedy it. Before going ahead with the work, be very sure that you have diagnosed the trouble correctly. "Check back" service calls are usually the result of careless and inaccurate diagnosis.
2. Put both gauges on the machine and check the pressures, recording them on the service report. Make such adjustments as are needed.
3. Examine the belt for wear and for tension. If it needs replacing, endeavor to sell the customer a new one if it is a charge service call. If on free service, and the belt is worn out, replace it free. If the belt tension is not correct, rectify it by moving the motor.
4. Using coarse sandpaper, clean the commutator of the motor. Examine the motor brushes, and if they are worn out or almost worn out, replace them. Oil the motor bearings. If there is a rattle in the motor due to end play, remove the rattle with an end thrust washer. See that the motor pulley and fan are tight.
5. See that the cap over the adjusting screw of the expansion valve is in place, and that there is a gasket under it. This cap must be tight to prevent moisture accumulating inside the bellows and retarding the action of the valve.
6. When testing the machine for leaks, examine every connection, cracked flare nuts, and concave tubing. The tubing should be reflared if the flare is doubtful. If the flare connections have not been shellacked, or if the nut has been moved since it was shellacked, paint both ends of all suction line flare nuts with shellac. When reflaring a tube, use a forged flare nut.
7. Clean the entire condensing unit and the brine tank if it is not covered with frost and needs cleaning. The dirt, dust, oil, etc., must always be removed from the condensing unit. See that the condenser is clean. An accumulation of dirt and dust will impair the efficiency.
8. Instruct the customer on two things: The motor must be oiled once a month. Show the customer both places. Explain to the customer that most satisfactory results will be obtained by defrosting the freezing unit regularly.
9. Clean up after you finish work. Do not go away and leave dirt on the floor, finger marks on the box, etc.
10. Make out your service report fully and in detail while on the job. Have the customer sign it. Collect the amount due, and give the customer the blue sheet after marking it "Paid."
11. Avoid talking to the customer about service troubles and complaints. Do not discuss these things unless you absolutely have to. Use diplomacy in all cases. Salesmanship is just as necessary in the service department as in the sales department.

Service on Multiple and Commercial Equipment

When servicing multiple equipment, the service man will do the following things in all cases:

1. Locate the cause of the trouble and remedy it. Be sure that you locate all of the things that are contributing to the trouble. The remedy will depend on conditions. Be thorough—so that the trouble will not recur.
2. All of the multiple systems have 10 per cent sulphur dioxide in them. They can be tested for leaks with ammonia. This allows you to thoroughly check the entire system for leaks with a minimum of time. If there is any indication of a shortage of refrigerant, the entire system must be checked. This rule must be adhered to in all cases.
3. Check both high and low pressures, and record them on the service report. Make whatever adjustments are needed.
4. Examine the belts for wear and tension. If the machine is on free service, and the belts are worn out, replace them. If the machine is on charge service, sell the customer new belts if possible. Adjust the tension of the belt if necessary, by moving the motor.
5. Clean the commutator of the motor with coarse sandpaper. Examine the motor brushes, and if they are worn out or almost worn out, replace them. Oil the motor bearings. See that there is not an excess of end play in the motor.
6. When a multiple system indicates a shortage of refrigerant, every part of the system must be checked without delay. Never leave it until the next day without going over the system for leaks. If there is too much frost on the units to make a thorough check, go over it anyway for major leaks, and report it to be checked again the next day after defrosting.
7. Test the water valve if it is of the solenoid type. See that it starts and stops the flow accurately with the starting and stopping of the motor.
8. Check the starter and see that it works properly. If there is trouble that you cannot remedy, call the office and report it so that the electrician can take care of it. The same applies to any electrical trouble that you cannot repair yourself.
9. When working on any freezing unit or suction line, if the flare nuts have not been shellacked, paint both ends of the nuts with shellac. If a tube has to be reflared, use a forged flare nut. Check every nut for cracks and concave tubing.
10. On commercial systems, there are some expansion valves. See that the cap over the adjusting screw is tight, and that the gasket is in place.
11. Clean the entire condensing unit. All of the dirt, dust, oil, etc., must be removed. If the machine has an air-cooled condenser, see that it is clean, as an accumulation of dust and dirt will impair the efficiency of the system.
12. Be sure that the customer understands the necessity of proper and regular defrosting, and that he knows how to oil the motor. The motor should be oiled every month.
13. Be neat and tidy in your work. This makes a good impression on everyone.
14. Make out your service report in detail while you are on the job, and have the owner, customer, caretaker, or whoever is in charge, sign it. Give the one who signs it the blue copy. If the call is C. O. D., collect the money and mark the copy you give the customer "Paid."
15. Every service man should have the good will of the caretakers of the apartment houses. Caretakers have to be considered, and you will get better co-operation from them if you are on good terms.

General Information

Many things are included in this article that the service men are doing now. The fact that something is mentioned does not mean that all service men have been remiss on that particular thing. With all of the service men carrying out the instructions given in this bulletin, our service will be uniform, and the desired results will be accomplished.

More time will be spent on many service calls than in the past, but the customer is going to be better pleased with the work done, and "check back" calls will be reduced, if not eliminated.

Never criticize the work of the service man on the job before you. This has happened at times, and it creates a very bad impression. Each man should remedy the same trouble the same way.

The attitude of the maid in a home to the refrigerating equipment is important. The owner is likely to get his opinion from her. See that she is satisfied with the operation of the machine.

You cannot work on refrigerators and keep them clean with dirty hands. You can usually find soap in the basement. Keep a supply of clean rags in your tool kit.

Do not argue with the customer over service charges. If they object to the charges or refuse to pay, have them call the office. Explain to them that you are given no latitude—that your service report is made out from the actual time and material used.

Night Service

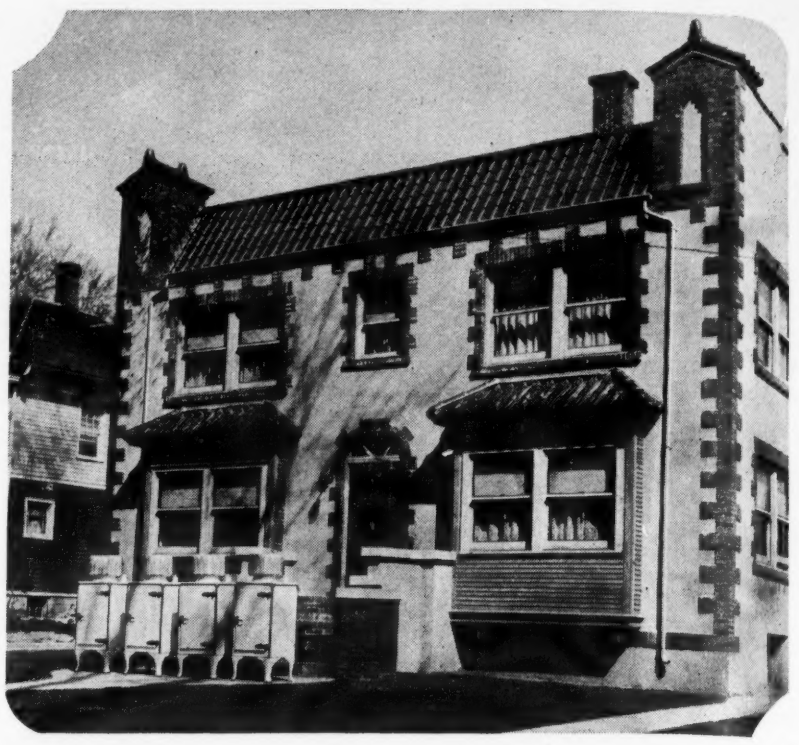
With a large number of people in Detroit depending on Absopure refrigeration, it is absolutely necessary that we have a night man in the service department office to receive telephone calls at any time during the night. Some one of the service department must be on call every night. The one on call must be where he can be reached by telephone. All service men should share in this.

Night service is primarily to take care of service calls on multiple and commercial systems. A multiple system that is "down" usually means twenty to thirty families without refrigeration. A commercial system that is not working may mean the loss of considerable valuable merchandise. Either must be taken care of at any time requested.

Domestic machines that go out of order during the night can usually wait until morning for repairs, but, if the customer insists, should be cared for during the evening.

The night man will get the phone number of the party calling on night calls, so that the service man on call can phone him if he needs to.

Sentinels of Safety



INSTALLATION of four General Electric refrigerators in an apartment house at Edgerton, Wis., was stopped long enough for the photographer to take a shot of the machines reposing in front of the building. The Wisconsin Power & Light Co. placed this installation. This company finds refrigeration a very good load builder for its power lines.

Copeland Takes to Diamond

COPELAND REFRIGERATION CO. of Detroit, the factory branch of Copeland Products, Inc., is now represented on the baseball sandlots. A Copeland nine has been entered in the Detroit Amateur Federation, consisting of 28 Class A teams. T. S. "Ted" Squires, service shipping clerk at the Copeland factory, will act as business manager of the team. An exhibition game was played Sunday, May 25. The official league opening occurred Sunday, June 1.

REFRIGERATION PATENTS

ISSUED MAY 27

1,759,828—FILLETING MACHINE. James J. Barry, Gloucester, Mass., assignor to Frosted Foods Company, Inc., Dover, Del., a Corporation of Delaware. Filed Apr. 30, 1927. Serial No. 187,784. 12 Claims. (Cl. 17—4.)

1,759,945—REFRIGERATING APPARATUS. Harry B. Hull, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Mar. 29, 1924. Serial No. 702,973. 2 Claims. (Cl. 62—120.)

1. In a refrigerating system of the absorption type including a generator-absorber, said generator-absorber comprising a substantially horizontally disposed elongated reservoir, end walls abutting the ends of the reservoir, a second wall surrounding the reservoir and connected with said end walls, said second wall being spaced from the reservoir to provide an air insulating chamber surrounding said reservoir, a conduit connected adjacent the top of the chamber for conducting a cooling medium thereto, baffles within said chamber, said baffles being arranged in staggered relation for directing the cooling medium over the surface of the reservoir, and a drain for the chamber adjacent the bottom thereof.

1,759,962—REFRIGERATING APPARATUS. Anthony T. Stock, Dayton, Ohio, assignor to Frigidaire Corporation, Dayton, Ohio, a Corporation of Delaware. Filed Jan. 31, 1928. Serial No. 250,835. 8 Claims. (Cl. 62—115.)

1. Refrigerating apparatus comprising a motor, a plurality of ducts constituting a condenser and draped in arcuate form around the outside of the body of said motor, a shield between the body of said motor and said condenser, and a fan adapted to force air about said ducts.

1,760,038—FINNED TUBE. Harry W. Bundy, Detroit, Mich., assignor, by mesne assignments, to Bundy Tubing Company, Detroit, Mich., a Corporation of Michigan. Filed July 14, 1927. Serial No. 205,593. 5 Claims. (Cl. 257—262.)

1,760,039—METHOD OF FORMING FINNED TUBE INTO SHAPES. Harry W. Bundy, Detroit, Mich., assignor, by mesne assignments, to Bundy Tubing Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 6, 1928. Serial No. 252,222. 9 Claims. (Cl. 113—33.)

1,760,067—PRESSURE-RELIEF VALVE. Roy E. Joyce, Los Angeles, Calif. Filed Sept. 2, 1927, Serial No. 217,203. Renewed Mar. 22, 1930. 2 Claims. (Cl. 137—53.)

1,760,099—BRINE AND EROSION CONTROL FOR RAILROADS. Roy E. Wing, Highland Park, Mich. Filed Feb. 4, 1929. Serial No. 337,499. 6 Claims. (Cl. 62—19.)

1,760,168—REFRIGERATION. Frank Desnoyers Peltier, Evansville, Ind., assignor, by mesne assignments, to Servel, Inc., New York, N. Y., a Corporation of Delaware. Filed Feb. 26, 1927. Serial No. 171,112. 14 Claims. (Cl. 62—95.)

1. An evaporator for refrigeration comprising a box-like frame adapted to receive ice trays, a header above said frame, evaporator tubing extending around said frame and connected to said header, said tubing comprising two sections, one section being arranged in heat exchange relation with substantially the greater portion of said frame and the other section being arranged in heat exchange relation with a relatively small portion of said frame and means to pass refrigerant first through the tubing in heat exchange relation with substantially the greater portion of said frame, thence into the header and therefrom through tubing arranged in heat exchange relation with a relatively small portion of the frame, said last mentioned tubing communicating with the upper part of said header.

1,760,175—REFRIGERATING APPARATUS. Sylvester M. Schweller, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Oct. 26, 1927. Serial No. 228,918. 14 Claims. (Cl. 62—95.)

9. A cooling unit for mechanical refrigerators comprising a plurality of sets of ducts, each of said sets including at least three vertically extending legs, a fin for each of said sets thermally connected with at least three of said legs, and ducts without fins interposed between and spaced from the finned sets.

1,760,176—REFRIGERATING APPARATUS. Sylvester M. Schweller, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Oct. 26, 1927. Serial No. 228,919. 11 Claims. (Cl. 62—75.)

1. A cooling unit adapted to be placed in the path of cooling medium flowing thereover for cooling such medium, said unit including a heat absorbing plate or fin and refrigerant conduit means having a plurality of downwardly extending branch portions, each thermally connected to one surface of the plate, and conduit means thermally connected to the opposite surface of the plate.

1,760,182—REFRIGERATOR CAR. Walter C. Stone, Webster Groves, Mo. Filed Oct. 28, 1927. Serial No. 229,355. 6 Claims. (Cl. 137—111.)

1,760,187—REFRIGERATOR-CAR-DOOR FASTENER. Arild M. Brenne, Grand Rapids, Mich., assignor to W. H. Miner, Inc., Chicago, Ill., a Corporation of Delaware. Filed Feb. 5, 1926. Serial No. 86,141. 8 Claims. (Cl. 268—72.)

1,760,195—REFRIGERATING SYSTEM. Thomas M. Gunn, Brooklyn, N. Y., assignor of one-sixth to Gorham Crosby, Glen Ridge, N. J. Filed Jan. 29, 1924. Serial No. 689,209. 21 Claims. (Cl. 62—115.)

1. In the method of recovering lubricant from the refrigerant in a refrigerating system wherein the refrigerant is compressed and liquefied in one part of the system and is caused to vaporize in the refrigerating part of the system, and the lubricant is soluble in the refrigerant, the step which consists in transferring heat from the compressed refrigerant to lubricant laden refrigerant leaving the refrigerating part of the system to distill the refrigerant from the lubricant.

1,760,217—ICE - CREAM - FREEZING SYSTEM. Charles Taylor, Buffalo, N. Y., assignor to Taylor Freezer Corporation, Beloit, Wis., a Corporation of Delaware. Filed Nov. 1, 1926. Serial No. 145,426. 6 Claims. (Cl. 62—114.)

1. An ice cream freezing system comprising a cabinet including a brine container, means for cooling the brine in said container, a freezer mounted on said cabinet above the level of the brine in said container, means for delivering brine from said container to said freezer, means for shutting off the flow of brine to the freezer, and means for draining the brine from said freezer back into said container.

1,760,475—FLUID PUMP OR COMPRESSOR. Willis H. Carrier, Essex Fells, N. J., assignor to Carrier Engineering Corporation, Newark, N. J. Filed Oct. 1, 1924. Serial No. 741,082. 23 Claims. (Cl. 230—79.)

1,760,621—REFRIGERATING APPARATUS. Swan F. Anderson, Rockford, Ill. Filed July 13, 1925. Serial No. 43,077. 22 Claims. (Cl. 62—115.)

1. In a refrigerating apparatus, a condensing coil, a container therefor, cooling liquid line connections therefor, a liquid tight housing arranged below the normal liquid level in said container, a compressor having communication with said condensing coil and mounted in liquid tight relation on said housing, also below the liquid level, and a motor completely encased within said housing having driving connections with said compressor.

1,760,636—REFRIGERANT COMPRESSOR. John A. Fortune and David E. Whitson, St. Louis, Mo., assignors of one-third to Edward Schaaf, St. Marys, Mo. Filed Aug. 6, 1928. Serial No. 297,838. 5 Claims. (Cl. 230—206.)

1. A compressor comprising a cylinder, crank case, and piston operable in the cylinder, said cylinder having its skirt perforated and extending into the crank case, and an oil absorbent packing around said skirt.

ISSUED JUNE 3

1,760,953—METHOD OF MAKING AND DISPENSING LIQUID CARBON DIOXIDE. James W. Martin, Jr., Yonkers, N. Y., assignor, by mesne assignments, to Dryice Equipment Corporation, New York, N. Y., a Corporation of Delaware. Filed Apr. 12, 1926, Serial No. 101,606. Renewed Oct. 2, 1929. 10 Claims. (Cl. 62—170.)

1,760,972—APPARATUS FOR MANUFACTURING ICE. Douglas K. Warner, Bristol, Conn. Filed Apr. 20, 1928. Serial No. 271,633. 20 Claims. (Cl. 62—158.)

1,761,013—REFRIGERATOR CABINET. Harvey D. Geyer, Dayton, Ohio, assignor to The Inland Manufacturing Company, Dayton, Ohio, a Corporation of Delaware. Filed Sept. 9, 1927. Serial No. 218,554. 6 Claims. (Cl. 217—17.)

1. A refrigerator cabinet comprising: a one-piece inner metal lining having an open side for the door-way, separate panels molded to shape from plastic material enclosing said lining and forming a cabinet therefor, said panels having inwardly projecting marginal portions abutting the corners of said lining and leaving a jacket chamber between the panel and lining, and heat insulating material filling said jacket chambers.

1,761,036—PUMP FOR REFRIGERATING APPARATUS. Harold A. Greenwald, Detroit, Mich., assignor to Thomas C. Whitehead, Detroit, Mich. Filed Sept. 6, 1927. Serial No. 217,774. 5 Claims. (Cl. 230—58.)

1. In combination, a motor, a support therefor, a tubular housing projecting laterally from said motor and carried thereby, a compressor carried solely by said housing, an operative connection between said motor and compressor including a shaft extending through said housing, and a seal surrounding said shaft, a wall of said housing having a portion constituting a bearing for said shaft and having a tubular portion projecting from the bearing portion and constituting a casing for the seal.

1,761,040—REFRIGERATING APPARATUS. Harry B. Hull, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed April 30, 1924. Serial No. 710,130. 12 Claims. (Cl. 62—120.)

1. In a refrigerating apparatus, a container adapted to receive refrigerant, said container having channels for circulating liquid cooling medium in contact with its outer surface and passages through the container adapted to permit circulation of air in contact with its outer surface.

1,761,041.—REFRIGERATING APPARATUS. Jesse G. King, Dayton, Ohio, assignor, by mesne assignments, to Frigidaire Corporation, a Corporation of Delaware. Filed Dec. 31, 1927. Serial No. 243,987. 9 Claims. (Cl. 220—24.)

1. A cover for an opening in an ice cream cabinet comprising in combination a top plate, a bottom plate, a spacer separating the plates near their edges, means holding the plates together, a gasket projecting beyond the spacer for engaging the cabinet and means between the top plate and the spacer and projecting beyond the spacer to receive force transmitted to the cover through the gasket.

1,761,085—COOLING OF LIQUIDS. Thomas S. Merrylees, Yeadon, Pa. Filed July 16, 1928. Serial No. 293,182. 26 Claims. (Cl. 62—91.5.)

1. In a liquid cooler adapted for use of solidified carbon dioxide, a receptacle for the liquid, and an insulating jacket snugly embracing the receptacle except for provision of a hollow to accommodate a charge of the solid refrigerant in contact with a portion of the wall of said receptacle.

1,761,086—LIQUID COOLER. Thomas S. Merrylees, Yeadon, Pa. Filed Sept. 14, 1928. Serial No. 305,949. 11 Claims. (Cl. 62—91.5.)

1,761,087—WATER COOLER. Thomas S. Merrylees, Yeadon, Pa. Filed Jan. 7, 1929. Serial No. 330,863. 3 Claims. (Cl. 62—91.5.)

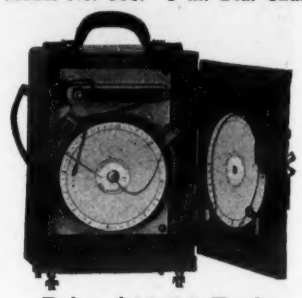
1,761,281—CONDENSER AND PROCESS OF MAKING THE SAME. Alex Taub, Detroit, Mich. Filed May 3, 1926. Serial No. 106,315. 2 Claims. (Cl. 137—75.)

1,761,483—FOOD PRESERVER. George Martin McGinnis, Rome, Ga. Filed Feb. 4, 1929. Serial No. 337,504. 2 Claims. (Cl. 65—53.)

PATENTS
Searches, reports, opinions by a Specialist in REFRIGERATION
H. R. VAN DEVENTER
Solicitor of Patents - Refrigeration Engineer
342 MADISON AVE. NEW YORK

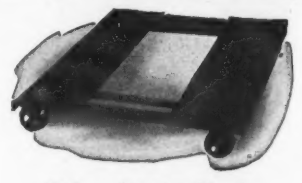
Offering Subject to Prior Sale:

18 Bristol's Electrical Time Operation Recorders
Model No. 916. 6 in. Dia. Chart



Price $18.00 Each

300 STEEL DOLLIES
with 4 in. Dia. Cast Iron Swivel Wheels
Base 40 in. x 31 in. x 6 in. Height



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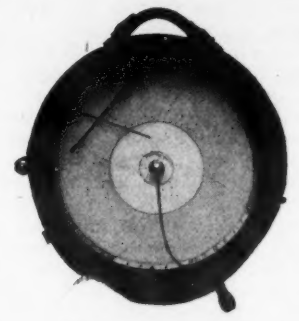
37 New at $20.00 Each

28 Slightly Used at $15.00 Each



Tag Electrical Time Operation Recorders
10 in. Dia. Chart

Both the Tag and Bristol's have been especially designed to be used for checking operating time of motors for electrical refrigerators. Can be used on 110 volts A. C. or D. C.

THE STANDARD STEEL CO.
15-17 Kimberly Ave. Tel. 9-3440 WEST HAVEN, CONN.

NEW ADJUSTABLE RANCO CONTROL

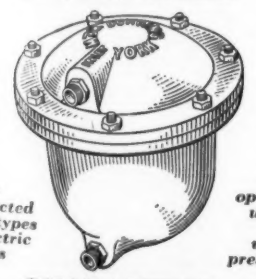
Provides an Ideal Temperature Range on Household Refrigerator

The Ranco Control for 1930 has many refinements and basic improvements which make it more than ever the ideal control for the modern household refrigerator.

WRITE FOR INFORMATION

The Automatic Reclosing Circuit Breaker Co.
COLUMBUS, OHIO U. S. A.

BUHRING WATER PURIFIERS
have been sold since 1891. During these 39 years they have been imitated in appearance, but never equalled in quality and performance.



Easily connected to all types of electric coolers

Will operate under any water pressure

GUARANTEED
to remove taste, color and odor.

For Information Write
BUHRING WATER PURIFYING CO.
40 Murray St., New York City

Representatives
Allen-Buhring Water Purifying Service, Chicago, Ill.
Boston Filter Co., Boston, Mass.

PATENTS
Secured for inventions relating to Refrigeration, Electrical Apparatus and Treatment and Handling of Foods and other important subjects.

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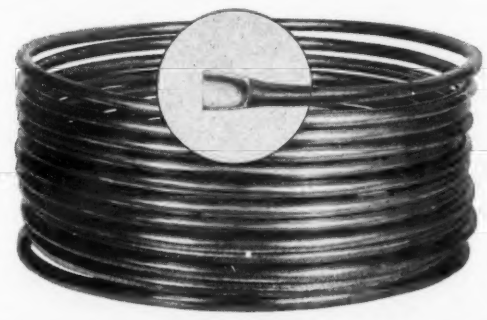
DEHYDRATED WOLVERINE SEAMLESS COPPER TUBING

Highest quality seamless copper tubing—perfectly dehydrated and solder-sealed—made to A. S. T. M. Specifications (B 68-27T)—ready for quick installation. Send your production requirements for quotations—or wire for rush shipment from stock.



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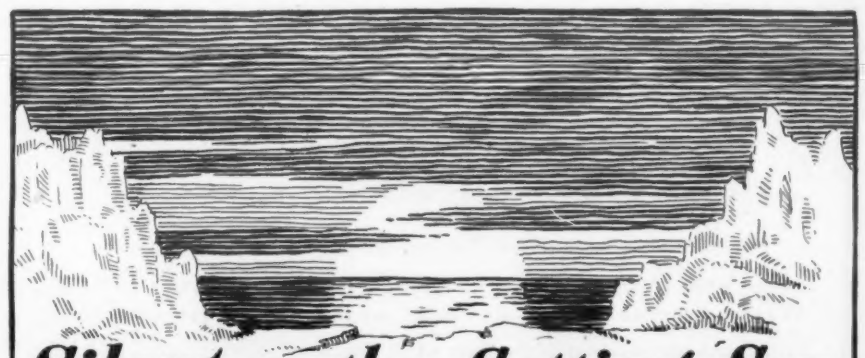
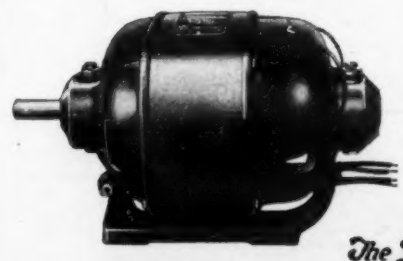
SEAMLESS COPPER BRASS & ALUMINUM
1431 Central Ave. Detroit, Mich.
Phone Cedar 5000

Sales offices in all major cities. Write or phone for name of nearest representative



Silent as the Setting Sun



So quiet that, standing a yard away, you cannot detect a sound . . . . so free from vibration that movement is unnoticeable . . . . so dependable that it runs for years without attention, the specially designed Leland motor is the best equipped unit for electric refrigeration yet developed.

The Leland Electric Co
Dayton Ohio. U.S.A.

REFRIGERATION TO FORE AT N.E.L.A. CONVENTION

(Concluded from Page 1, Column 5)

figure of 1,756 kilowatt hours per domestic customer per year.

"The substantial value of these major appliances as load builders is indicated by the average annual per customer consumption, which is estimated to be 600 kilowatt hours for refrigerators, 1,375 kilowatt hours for ranges and 3,000 kilowatt hours for water heaters.

"It should be remembered, too, that domestic consumption is not subject to the fluctuations which often occur in other types of business. It is a strong shield against depression, and thus it is doubly desirable that it be thoroughly developed."

The convention is now in full swing with big delegations present from every section of the country. Mayor James Rolph, Jr., welcomed the visitors at the first general session in the Municipal Auditorium, yesterday morning, and was followed by Matthew S. Sloan, of the New York Edison Co., president of the N. E. L. A. Sectional meetings began yesterday afternoon and the convention is now hard at work mapping out the industry's program for the next twelve months. The convention will be adjourned on Friday.

G. E. TO SEEK HONORS IN NATIONAL BALLOON RACES

Cleveland, Ohio.—To the long list of media used by the electric refrigeration department of the General Electric Company has been added sky advertising.

The "General Electric Refrigerator" balloon has been entered in the National Elimination Balloon Races, which start on the night of July 4 from Metropolitan Air Terminal, Houston, Tex., and end wherever the fates decree.

Svend A. U. Rasmussen, famed balloonist and holder of the world and American records for distance for the type of bags entered in this contest, will pilot the "General Electric Refrigerator" balloon. As aide, he will have Tracy W. Southworth, secretary of the Detroit Balloon Club. They have made two notable flights together—in the national race in 1929, and the international contest in 1928. Rasmussen has flown in ten races and has won two and finished second in two others. Sixteen balloons are entered in the Houston race.

If the "General Electric Refrigerator" bag finishes first or second in the July 4 contest, it will be entered in the Gordon Bennett International Balloon Race, which is to be held in Cleveland on Labor Day. The two balloons traveling the longest distance in the Houston race will be selected to represent America—with a Goodyear entry which won last year's contest — in the international event. Each country is permitted three entries in the international race.

On the side of the balloon will be a sign which will be visible for quite a distance and which will advise all those below that electric refrigeration has taken to the air. The sign is thirty-five feet in length.

The balloon already has been shipped to Houston and the pilot and aide are preparing to arrive in the Texas metropolis several days in advance to complete final details for the flight.

GENERAL ELECTRIC CAMP DATES SET

Cleveland, Ohio.—Camp Refrigeration IV is to be held at Association Island, Henderson Harbor, N. Y., on August 20-23, according to announcement by the electric refrigeration department, General Electric Company.

Two New Sales Directors

A. W. CLARK

was recently advanced to the post of director of sales for the Wayne Home Equipment Company.

W. C. ROWLES

has been named sales manager of the refrigeration division of the American Foundry Equipment Co.

AMBROSE IN SPOTLIGHT AT FRIGIDAIRE MEETING

Kansas City, Mo.—R. B. Ambrose, Frigidaire zone manager, addressed the sales department of the Kansas Power and Light Company at Topeka recently.

R. E. Parsons Electric Company, Frigidaire distributors for this territory, have appointed the A. E. Nokes Furniture Company as dealers in North Kansas City.

The "Flying Squadron"—special campaign men—have just completed a short campaign for the Frigidaire dealer in Chillicothe, Mo. The net result was 15 new Frigidaire installations in homes and two commercials in institutions. One of the sales was for equipment in the kitchen of the State Industrial Home for Girls, located in Chillicothe. The "squadron" was composed of O. E. Beach, R. W. Hill and H. L. Middaugh.

CAMP CO-OPERATION DATES ADVANCED

New York, N. Y.—Dates for Camp Co-operation X, ninth conference of representatives of electrical leagues and others interested in co-operative market development work have been advanced several days to Thursday, July 31, to Monday, August 4, inclusive. This conference is held under the auspices of the League Council and is sponsored by the Society for Electrical Development.

Subjects have been selected and speakers approached which will round out a program touching on practically every phase of electrical market promotion by co-operative means. One full session and part of another will be devoted to open forum discussion of league problems.

Committees have been appointed to take care of reception of conferees, entertainment, sports and other features which form a part of these annual league conferences. Election of members of the League Council for the year 1930-31 will take place at this conference.

MAJESTIC PRODUCTS, INC. ORGANIZED

Evansville, Ind. — Majestic Products, Inc., incorporated to act as exclusive Evansville dealer in Majestic refrigerators and radio sets, will open sales and service headquarters about July 1 at 208 Southeast Fourth Street, William H. Sandefur, Evansville, vice-president and sales manager, stated.

The new company is headed by Henry Marshall, Jr., of Lafayette, Ind., with Louis Bromm, Evansville, as secretary-treasurer. Mr. Sandefur is sales manager of the Frigidaire department, Stahlschmidt Piano Company, who is closing out the business.

WESTINGHOUSE APPOINTS DEALER IN TOLEDO

Toledo, Ohio—The J. W. Greene Co., Jefferson Avenue and Ontario Street, has been appointed exclusive dealer for Westinghouse electric refrigerators. The company has an attractive display room on one of Toledo's most traveled streets where all models are shown.

H. A. Bonsteel, who formerly had charge of the commercial department of the General Electric branch in Toledo, has been appointed manager. J. V. Brumbaugh, associated with the J. W. Green Co. for three years, will be sales promotion manager.

REFRIGERATORS BATTLE RADIOS AT BIG SHOW

Atlantic City, N. J.—A display of General Electric refrigerators attracted considerable attention at the recent national radio convention and exhibit here.

P. B. Zimmerman, general sales manager; M. F. Mahoney, assistant to the sales manager; A. C. Mayer, merchandising service manager, and others attended the show.

THE CONDENSER

ADVERTISING RATE fifty cents per line (this column only).

SPECIAL RATE if paid in advance — Positions Wanted — fifty words or less, one insertion $2.00, additional words four cents each. Three insertions $5.00, additional words ten cents each. All other classifications—fifty words or less, one insertion $3.00, additional words six cents each. Three insertions $8.00, additional words sixteen cents each.

POSITIONS WANTED

WANTED — Experienced commercial salesman to sell Frigidaire. Byars-Forgy Refrigeration Co., 102 E. Lafayette Street, Tampa, Fla.

WANTED experienced commercial refrigeration field representative to appoint and aid in dealer retail sales. Give full details regarding experience, ability, desired salary, photo, if available, etc. Box 262.

Do you need a thoroughly trained refrigeration executive with the following background? Technical refrigeration engineering training, service school instructor, sales promotion and factory sales representative. Address Box 261.

EXECUTIVE with large electric refrigerator manufacturer is contemplating making a change. Experienced in service and engineering administration. Box 257.

CHIEF Engineer Available. Eight years' experience in domestic and commercial refrigeration with popular manufacturer charge of engineering design and production methods. Wishes to communicate with manufacturer. Box 253.

MISCELLANEOUS

FOR SALE—Eighty rolls Balsam Wool, 44" wide, ½" thick, 90 ft. long, 330 sq. ft. to the roll. Forty-eight rolls 44" wide, 1" thick, 45 ft. long, 165 sq. ft. to roll. These rolls are in perfect condition and will sell at very attractive price. George J. Bresth Co., 255 Howard St., Lowell, Mass.

FITTINGS - TUBING

Largest Stock in the East

DOMESTIC UTILITIES

Division of the Refrigeration Corp. of Maryland

ARLINGTON, BALTIMORE, MD.

It not only filters— It purifies

WATERS PURIFIERS

for individual coolers and circulating systems—will cure your water cooler troubles—will remove taste, odor, sediment, discoloration—low initial cost—minimum servicing requirements—made in four sizes—write for quotations.

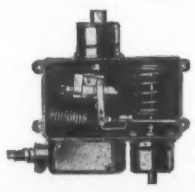
***The* WATERS FILTER AND COOLER COMPANY**

148 CHAMBERS ST., NEW YORK, N. Y.

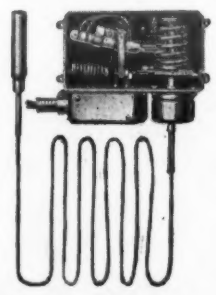
Refrigeration Engineers, everywhere

endorse this

MERCOID



Model 1BA for low side control by pressure. Adjustable range—any cut-in or cut-out points between 25 inches vacuum and 25 lbs. pressure. High side cut-out—adjustable for pressures up to 160 lbs.



No. 848-K and L, for temperature control of liquids and gases, adjustable range—K minus 30° to plus 60°. L-1 from plus 10° to 70°.

especially designed *for* Commercial Installations

THOUSANDS of these Dual Mercoids are in operation in all parts of the world. This model is especially designed for "commercial" work—Ice Cream Cabinets, Soda Fountains, Meat Boxes, Florist Boxes, Milk Coolers, Multiple Hook-ups, etc.

One instrument combines either pressure control or temperature control for the low side and high pressure cut out. Adjustable over a wide range for any desired "cut-in" or "cut-out."

These controls operate with the well-known Mercoid switch—no exposed arc—no corrosion of contacts—and the control carries full line current, either 110 or 220 volts.

Write today for complete information on these instruments and the Solenoid Valve for water-cooled units.

AMERICAN RADIATOR COMPANY

Accessories Division, Dept. MER-6

40 West 40th Street, New York, N.Y.

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ELECTRIC REFRIGERATION NEWS
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United States and Possessions: ☐ $2.00 per year. ☐ Three years for $5.00
All other countries: ☐ $2.25 per year. ☐ Two years for $4.00

I am enclosing payment in the form of ☐ Check ☐ P. O. Order ☐ Cash

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Refrigerators Tested • Both Ice and Mechanical

Refrigerators Tested for Performance in our Refrigerator Laboratory. This service is unique for the Manufacturer or Distributor.

We invite your inquiries.

George B. Bright Co.

Regrigerating Engineers and Architects

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Guaranteed **FILTERS** for Electric Water Coolers. *Pure, Clear Water.*

FILTRINE MANUFACTURING COMPANY
49 LEXINGTON AVE. Brooklyn, N.Y.
Manufacturers of FILTERS & COOLERS of all sizes

Refrigerated Food Section

ELECTRIC REFRIGERATION NEWS

Registered U. S. Patent Office.

The business newspaper of the refrigeration industry

VOL. 4, NO. 21, SERIAL NO. 97 | Copyright, 1930, by Business News Pub. Co. | DETROIT, MICHIGAN, JUNE 18, 1930 | Entered as second class matter Aug. 1, 1927, at Detroit, Mich. | IN TWO PARTS, PART 2

CHARTING THE COURSE

THE Refrigerated Food section of ELECTRIC REFRIGERATION NEWS was first published in March and has been a regular feature ever since. The rapid spread of interest in the production and distribution of foodstuffs under refrigeration is responsible for its existence.

A large portion of the space in the Refrigerated Food section has been devoted to quick-frozen foods, not because they are the only refrigerated foods worthy of comment, but because the public interest in them is so great. The first article on the General Foods campaign in Springfield appeared less than a week after the first sale was made. Other refrigerated products have not been neglected, as a brief review will prove. There have been articles on the freezing of fruit in the North and in the South, on the marketing of fresh meats in packaged form, on the cooling of candy, and a wide variety of similar subjects. The latest improvements in equipment have been recorded. The women home economists, who are doing such important work have their own department. Recipes for numberless frozen delicacies have been printed. The policy of this section is to cover the entire field.

GOVERNMENT

Assisting Lake Michigan Cherry Growers in Marketing Big 1930 Crop

Traverse City, Mich.—Co-operation between the hitherto rival cherry growing territories on opposite sides of Lake Michigan, and the backing of the Federal Farm Board, have brought about a new and promising situation which bids fair to prove of lasting benefit. For many years cherry growing has been a precarious occupation. Prices have been unstable, marketing facilities have been uncertain, and the average farmer has not received a fair return on his investment in land, time and labor.

Various means of relieving the situation have been tried in the past with more or less success, but until this year there has been little solidarity of effort. Well over two-thirds of the cherries grown in the United States are produced in the northern Lake Michigan region. The growers of Door County, Wisconsin, centering at Sturgeon Bay, produce about one-third of the nation's crop, and on the Michigan side of the Lake, a group of seven counties account for nearly half the crop. The only other cherry section of note is that around Sodus, New York, which was described in the May 7 issue of the Refrigerated Food section of the NEWS. The most productive land is on peninsulas formed by Lake Michigan and its various bays. This land, with water on either side, seems peculiarly suited for cherries.

One-Third of Crop Frozen

In the last few years, freezing has been steadily gaining as a method of preserving cherries for the market. The Grand Traverse Packing Co. of this city opened its plant in 1921 and began freezing cherries the following year. Across the Lake at Sturgeon Bay, the first freezing was done two or three years later. At present about one-third of the entire crop is frozen, the remainder being canned. The growing popularity of freezing probably is due largely to the fact that frozen cherries can be kept indefinitely without deterioration. Canned cherries begin to deteriorate after eighteen months. Of course, there is an added expense for refrigeration in keeping the frozen fruit, but that expense is being balanced against the fact that the cherries are better preserved by freezing. The result is that more cherries are being frozen each season.

For the last twenty-two years the Fruit Growers' Union of Sturgeon Bay has maintained a successful organization. In that time it has accumulated assets worth about $350,000, and when the proposal was made to join forces with the Michigan growers in an appeal to the Federal Farm Board, it was decided to pledge these assets to the government. After thorough consideration of the situation lasting many months, the Farm Board laid down certain conditions which the cherry growers had to meet. They were required to enroll in their organizations growers controlling 60 per cent of the cherries raised in their area, to undertake the responsibility of managing the enterprise, and to form a Joint Sales Agency charged with the duty of marketing the crop. C. S. Wilson, member of the Federal Farm Board from New York, carried on most of the negotiations on behalf of the Farm Board, although several hearings were held by the full Board. He was enthusiastically in favor of the plan, and did a great deal of work in connection with it. He would like to see the growers from Sodus in his own state included in the set-up, and they may join later on.

The Federal Farm Board made $720,000 available for the cherry growers, and among the first steps taken was the purchase of the Grand Traverse Packing Co. on the Michigan side of the Lake. This company, formed as a sort of co-operative organization in 1921 (the growers at that time owning about 80 per cent of the stock), had gradually drifted away from co-operative control, although some of the original farmer owners still held their stock and were represented on the directorate. This plant has been freezing fruit, fish and other products ever since it was put up. Two forty-ton horizontal ice machines made by the Creamery Package Manufacturing Company of Chicago, have

(Concluded on Page 2, Column 4)

Safeguarding the Appetite

DISTRIBUTING

Frozen Products by Truck in Texas

Galveston, Texas—That the South is not so apathetic in regard to the possibilities of quick-frozen foods as indicated in a recent issue of the Refrigerated Food Section of ELECTRIC REFRIGERATION NEWS, is being demonstrated by some of the activities in this section. Although the development of new methods of production and distribution of foodstuffs is certain to be a slow process, many of the alert men in this part of the South are awake to the opportunity that has been presented to them.

An interesting phase of this activity is being developed here in Galveston, where the Food Products Company of Galveston is operating a dry ice refrigerator test truck in the adjacent territory. The truck has been in the field for the last four weeks, gradually making all the possible contacts. It covers a route that makes it necessary to travel 1,250 miles per week. The truck carries two men, both of them carefully chosen salesmen, who operate the truck and also solicit the trade, calling on dealers, hotel cafes, and other similar establishments.

Such reports and observations as have been made thus far indicate that a considerable volume of business will result. Another truck has been ordered, to take over local deliveries and to assist the first truck, which carries two tons of frozen food products, such as frozen shrimp-prawn, haddock, frog saddles, white and dark cooked crabmeat, friers, broilers, red fish whole, trout whole, flounders whole, strawberries, loganberries, raspberries, blueberries, rhubarb, cherries, figs and grapefruit.

(Concluded on Page 4, Column 3)

INSTALLATION of Copeland equipment in the H. & M. Sandwich Shop, located at 120 East Jefferson Street, Syracuse, N. Y., was made a short time ago by the B. I. Cooper Sales Company, also of Syracuse.

The Copeland equipment installed in this restaurant consists of 1 model X1200 Copeland condensing unit, which handles the counter equipment listed here:

Two 5-gallon can ice cream compartments, converted from ice and salt to mechanical refrigeration.

Two bottle and storage compartments equipped with No. 4T Copeland Larkin coils.

Two salad cases used for display.

(Concluded on Page 10, Column 4)

AMHERST

Grads Relish Birdseye Foods

South Hadley, Mass.—Ninety Amherst College alumni of the class of 1910 were treated to a course dinner of Birdseye quick-frozen foods at the hotel on the summit of Mount Holyoke, June 13. Both Clarence Birdseye, inventor of the Birdseye process, and Clarence Francis, president of the General Foods Sales Company, are members of this class, which turned out strong for its twentieth reunion in connection with the college commencement.

The occasion enabled men from many parts of the United States to partake of these foods for the first time. Two women members of General Foods Corporation's staff in Springfield, Mass., went to Mount Holyoke to supervise the cooking of the meal, which was warmly praised by the class members and rated as a success, notwithstanding that facilities for cooking meals at the hotel are rather limited.

DUCKLINGS

And Chickens in Springfield

Springfield, Mass.—The Frosted Foods sales campaign begun here just about one hundred days ago, is losing the campaign atmosphere and is settling down into an ordinary merchandising operation. Originally scheduled as a sixty-day trial of the public taste, it long ago proved that the public of this New England city likes quick-frozen products.

An evidence that the process of transition is well under way is the fact that in the Thrift Stores owned and operated by Charles F. Meek, most of the General Foods Corporation's employees have been withdrawn and Thrift Store clerks are now handling the sales of the Birdseye products. The women demonstrators employed by General Foods still remain, for at least a portion of the time.

All of the retailers who have been co-operating with General Foods since the campaign began seem anxious to continue the sale of Frosted Foods. Mr. Meek has expressed himself on the subject a number of times, and always to the same effect. He believes that quick-frozen foods are here to stay and thinks that they have solved some long standing problems.

In the meantime sales are continuing at high levels, and although the frozen foods are becoming more or less of an old story to Springfield, that fact does not seem to have any appreciable effect upon the demand.

The addition of ducklings and broilers to the Birdseye line, beginning June 5, lent a new zest to the selling at the stores. These items were made

(Concluded on Page 12, Column 1)

MILLION

Dollar Order Indicates Wider Activity For Fresh Packaged Meats

New York, N. Y.—That the Hygrade Food Products Corporation intends to push the sales of packaged fresh meats on a most extensive scale is demonstrated by the fact that the Kelvinator Corporation of Detroit and Ottenheimer Brothers of Baltimore have received an order for nearly $1,000,000 worth of refrigerated display units from which Hygrade Products will be sold. This big order has been placed with Kelvinator and Ottenheimer by the Display Refrigerator Service, Inc., of this city, the corporation organized by Samuel Slotkin to handle the equipment end of the business.

Mr. Slotkin's methods of distributing packaged fresh meats was described in the Refrigerated Food section of May 7. The various cuts are packed in neat boxes with cellophane tops through which the product can be plainly seen. An efficient distribution system will keep dealers supplied with fresh meats daily.

The display cabinets will be built by Ottenheimer, and Kelvinator will supply the refrigerating units. The cabinets will be specially constructed, will be modernistic in design, and will provide an unusually attractive display. Under the plan sponsored by Mr. Slotkin, the display cabinets will be rented to the retailers in whose stores they are placed and will remain the property of the operating company. No capital outlay will be required of the storekeeper.

These meats, of course, will not be quick-frozen, but they will be graded and packaged at the packing plant, so that the customer will purchase a trademarked packaged product, that has back of it a well known organization.

A number of retail shops in New York and Brooklyn are already handling these products with almost uniform success. The contract with Kelvinator and Ottenheimer is reported to call for the manufacture of approximately 1,000 of these display cabinets to be supplied as needed. Presumably they will be placed in stores as fast as the manufacturers can turn them out.

The refrigerating machinery includes a Kelvinator standard condensing unit, and the cooling unit consists of specially designed coils. Unusually attractive lighting fixtures will add to the beauty of the cabinets. A nine-foot combination display case also will be manufactured. Extremely low temperatures will not be needed in either piece of equipment.

Kelvinator and Ottenheimer have combined forces with notable success in the construction of some of the display and storage cases used by the General Foods Corporation in the Springfield sales campaign.

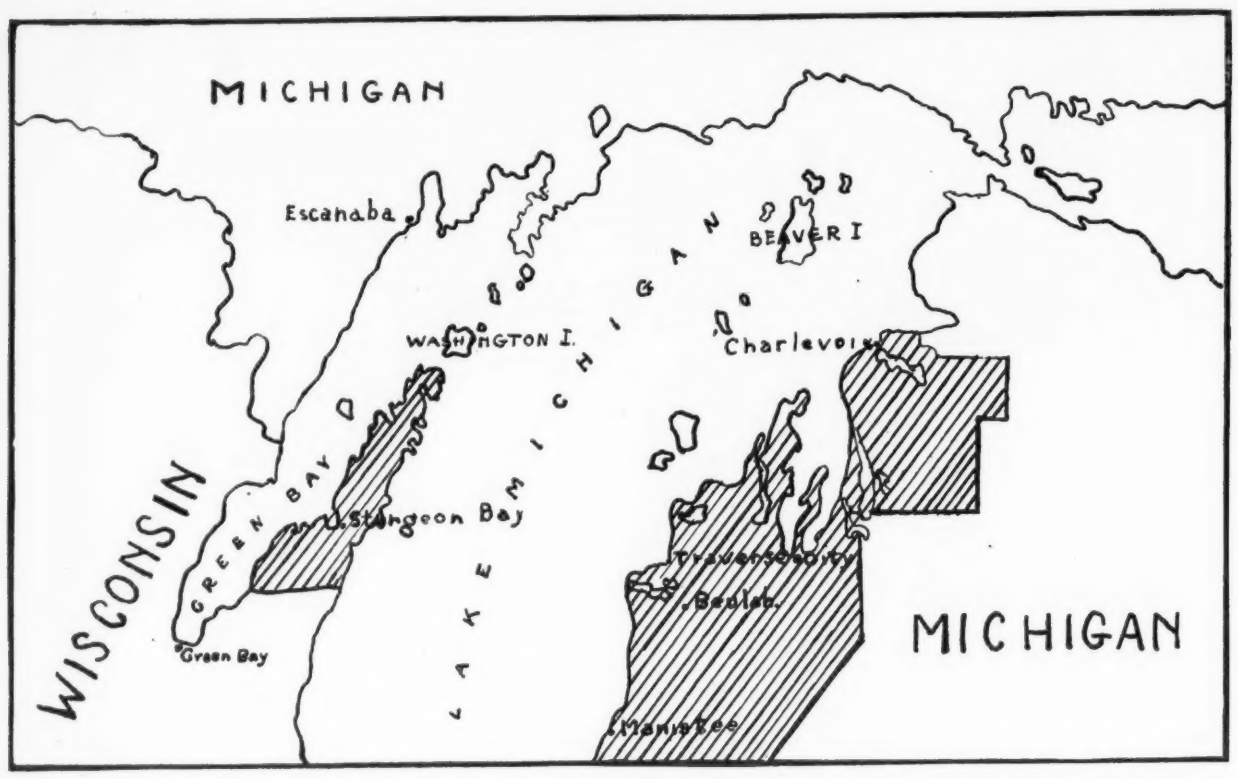
LANDMESSER TELLS ABOUT QUICK FROZEN FOODS IN CALIFORNIA

San Francisco, Calif.—At the recent convention of Pacific Coast General Electric refrigerator distributors, held at the Palace Hotel, San Francisco, one of the chief topics was the sales value of frozen foods. Summing up, W. E. Landmesser said: "June's luscious berries, when frozen by the new process, may be thawed out and grace the Christmas table as fresh berries." He pointed out the wisdom of taking quick advantage of this oncoming tidal wave of frozen food popularity, when vegetables, meats, sea foods and fruits will be handled and distributed in this manner.

LIPMAN INSTALLATIONS IN THE SOUTH

Memphis, Tenn.—A complete line of Lipman ice machines is on display here by the Southern Engineering Company. Following installations are now being made or have just been completed by this firm: Greenbrook Nurseries, Jackson, Miss.; Dr. Pepper Bottling Co., Dresden, Tenn.; Dr. Pepper Bottling Co., Columbus, Miss.; Alcazar Hotel, Clarksdale, Miss.; Belzoni Bottling Co., Belzoni, Miss.; Red Star Yeast Co., Little Rock, Ark.; Kroger Grocery, Hot Springs, Ark./ Druggists Ice Cream Co., Memphis.

Cherryland



THE shaded portions of the map show the cherry growing sections of Wisconsin and Michigan which have combined their marketing efforts this year with the aid of the Federal Farm Board. The Wisconsin orchards are in Door County which occupies the peninsula between Green Bay and Lake Michigan. Sturgeon Bay is in the center of activities.

On the Michigan side of the lake there are seven counties in which cherry raising is a major occupation. They are Grand Traverse, Antrim, Leelanau, Charlevoix, Benzie, Manistee and part of Wexford.

GOVERNMENT

(Concluded from Page 1, Column 1)

been doing the work. About three years ago, Petersen rapid freezing machinery was installed, with the expectation that large quantities of Lake fish would be available for freezing. The equipment has a capacity of 1,000,000 pounds of fish but due to the fact that sufficient quantities of fish were never furnished, the fish business has not proved successful. Last fall about 200,000 pounds were frozen in a period of about four weeks. Lake trout predominated, although there were large numbers of cisco, and a few pike and whitefish. Whether or not fish will be frozen in the future will depend upon the quantities available. At present the outlook is not promising for this particular form of freezing activity.

New Freezing Room Constructed

In preparation for an extension of its work a new freezing room has been constructed in the Traverse City plant and a new vertical forty-ton ice machine, also made by the Creamery Package Manufacturing Company, is being installed. The new freezing room is being insulated with eight inches of Armstrong cork. When it is finished the plant will have about 40,000 sq. ft. of freezing and cold storage space. It is possible to obtain temperatures as low as –32 F., although most of the cherries are frozen at –25 F. and kept at zero or 5 above.

Some unusual sidelines have been developed at Traverse City. Due to the fact that it began as a co-operative plant, the farmers became accustomed to using it for keeping their own meats. They would slaughter a hog or a beef on the farm, and then bring it in to the plant for safekeeping. At present a considerable area is filled with meat in storage for the members of the cherry growers' association, and over in one corner is a special locked compartment where they keep their winter furs.

The most unusual job of all is the keeping of fox meat. There are a number of large fox farms in the country around Traverse City, and the owners of these farms have taken advantage of the proximity of the cold storage warehouse. Foxes like meat, but the expensive cuts are not on their menu. Their staple meat is horse flesh, and this has resulted in the scouring of the nearby territory for decrepit horses. If he wants to keep alive in this particular section of Michigan, a horse must show signs of vim, vigor and vitality. If he falters, even for a moment, the foxes are pretty sure to get him. At present there are 500 head of horses in cold storage here, and there is room for more. The remaining horses in this vicinity are going about their daily tasks with unaccustomed celerity.

For titbits the foxes eat salt herring from the Atlantic and jackrabbits from Nebraska. Both are present in the fox meat room of the warehouse in large quantities. And some of the fox breeders are completing the circle by keeping fox pelts in cold storage here while awaiting the market. When the plant was built no one expected that foxes would contribute to its support, but they are carrying a fair share of the expense of running the establishment.

Season Lasts Six Weeks

But to get back to the cherries. The packing season begins about July 1, and lasts for six weeks, the last cherries being packed about August 15. Indications are that this year's crop will be a big one, and preparations are being made for freezing and packing record quantities of fruit. Five stations are maintained where the cherries are pitted and packed. They are at Sutton's Bay, Elk Rapids, Beulah, Frankfort and at the freezing plant. The cherries which are to be frozen are pitted and packed at these outlying stations, which are close to the orchards, and then hauled to Traverse City. They are frozen in 16, 30 and 42 pound cans, and in kegs and barrels. The kegs hold 125 pounds and the barrels 400 pounds. They are packed with syrup or sugar before freezing various combinations of quantities being used. Four parts of cherries to one of sugar, and three to one, are popular combinations, and there is one customer who wants 380 pounds of fruit to 50 pounds of sugar. This season much of the fruit will be frozen under vacuum.

As in New York State, there has been a little trouble with discoloration on top of the pack where the cherries are exposed to air, but the quantity of fruit so affected has been too small to make any great difference.

The work at Traverse City is under the direction of A. J. Rogers, himself a cherry grower. Mr. Rogers, who has a farm at Beulah with about 100 acres devoted to cherries, has been a director of the Grand Traverse Packing Company for many years, and has been working actively for a long time to get the growers on both sides of the Lake together and to enlist the aid of the Federal Farm Board. He made a number of trips to Washington in support of the project. He has been identified with the work from the beginning, knows all the details of the negotiations, and is admirably fitted for the management of the co-operative job on the Michigan side of the Lake. He in turn is under the direction of H. W. Ullsperger, of the Sturgeon Bay Fruit Growers. Mr. Ullsperger visits the Traverse City plant about once a week and keeps in close touch with its progress. In direct charge of operations at the plant is L. C. Eller, who has been superintendent for many years, in fact, ever since the plant was opened.

In the past the three things lacking in the co-operative efforts of the Michigan cherry growers have been, production capacity, money and management. The enlarged plant will provide the capacity, the Federal money at 3½ per cent has solved that part of the problem, and the management, fortified by the experience of twenty-two years at Sturgeon Bay, should be well able to handle the big job.

Baker Orders 3,000 Barrels

There are about 1,000 farmer members of the two fruit growing organizations, the Wisconsin group slightly outnumbering that on the Michigan side. The Joint Sales Agency has been hard at work for some time and has disposed of a goodly portion of the crop in advance. One Philadelphia pie baker, for example, has contracted to buy 3,000 barrels of frozen cherries a year, for five years. Orders like this are putting the project over, and promise to make it possible to pay the grower a fair price for his cherries.

The Federal Farm Board, in addition to its loan, is watching the work, and taking a keen interest in the progress being made. It is throwing all of its influence into the scales, and success seems assured.

SWIFT & CO.

Planning Drive in New Market

Holyoke, Mass.—Swift & Co. is taking steps to develop sales of quick-frozen meats from its warehouse here. A special refrigerated enclosure, approximately 10 by 18 feet in dimensions has been built for the primary purpose of keeping in stock the full Swift line of these meats. Up to the present only a few items have been carried here, and only seven or eight stores in this city, South Hadley Falls and other adjacent villages have been buying these meats, and these only in small amounts and in most cases, intermittently. From now on a drive will be conducted to build up sales of this line, according to J. M. Welch, branch manager. For one thing, efforts will be made to have the dealers install display cases so that their customers can see the stocks. Another point to be stressed is that dealers shall keep the quick-frozen products on sale continuously instead of sporadically.

FISHING

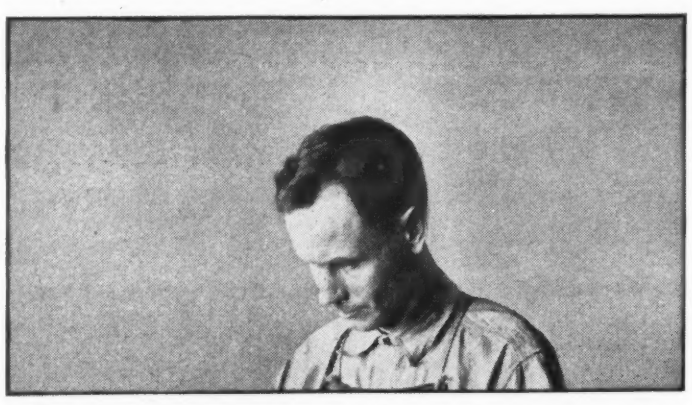
For the Refrigerator Order

IN hot pursuit of a prospect, S. F. Osteen, of the Electric Refrigeration Co. of Tampa, arrived at a prospect's home to find that he had gone fishing for the day. Not giving up easily, Mr. Osteen immediately hot-footed it to the dock, arriving before his prospect had started on his trip.

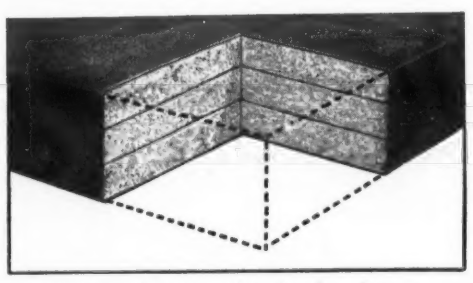
Receiving the prospect's assurance that he did not care to talk business then, Mr. Osteen joined the fishing party. The trip lasted all day, but upon their return in the evening, Mr. Osteen had the signed order for a refrigerator and in addition had an enjoyable outing. Whether Mr. Osteen is as good when it comes to fishing is not known.

Traverse City is the center of Michigan's cherry district

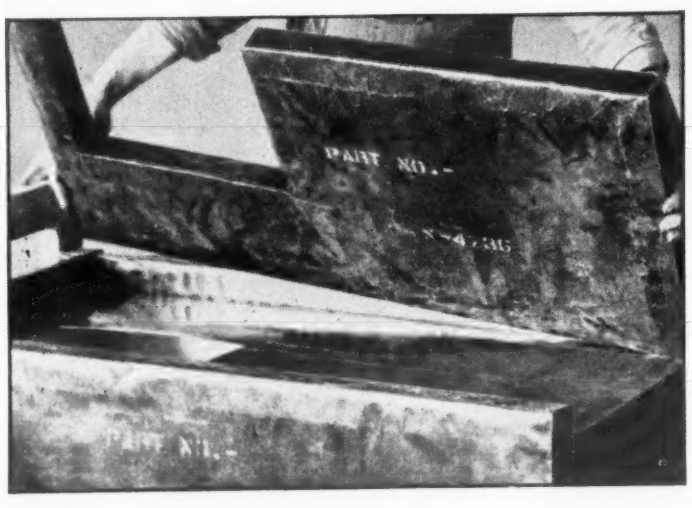
Increase the efficiency of



Mechanical Refrigerators with this practical Sealed Slab



This actual photograph makes clear the permanent, non-settling and rugged construction of Balsam-Wool Sealed Slabs. Note that the Slab is built up with Balsam-Wool Blanket, hermetically sealed and wrapped in tough, waterproof covering



BALSAM-WOOL Sealed Slabs combine high insulating efficiency with every requirement for practical refrigerator construction.

It is ideal insulation—factory-made to your own specifications for width, length, thickness! Built up to the required thickness with Balsam-Wool Blanket—positive assurance that each slab is completely filled with a *permanent*, non-settling, highly efficient insulation.

Average thermal conductivity does not exceed .25 B. t. u. per hour, per square foot, per one inch thickness, per one degree Fahrenheit difference in temperature.

Labor saving! Ready to put quickly in place without patchwork. Flexible so as to fit snug—yet rigid enough for easy handling. Light in weight!

Balsam-Wool Sealed Slabs are carefully sealed against moisture. They have a firm edge extending all around the slab.

Durable, sanitary, vermin-proof, odorless, they are also highly economical to use.

Notice their construction in the photograph above. Examine an actual slab of this *perfected* type. You may secure one *free*. Write to our nearest sales office and a complete slab will be sent you postpaid.

WEYERHAEUSER FOREST PRODUCTS

WOOD CONVERSION COMPANY

Mills at Cloquet, Minnesota

Industrial Sales Offices
Chicago, 360 No. Michigan Ave.
New York, 3107 Chanin Bldg. Detroit, 3084 West Grand Blvd.

Manufacturers of Balsam-Wool Insulation for Domestic Refrigerators, Motor Buses and Airplanes; Balsam-Wool Refrigerator Car Insulation and Steel Passenger Car Insulation; Balsam-Wool Standard Building Insulation and Nu-Wood Insulating Wall Board and Lath; Balsam-Wool Acoustical Blanket

THE LATEST CABINET BY Seeger

This without doubt is the greatest value ever presented in the refrigeration industry, owing to the fact that it has so many features found only in higher priced cabinets. Distributors maintain that it is one of the fastest selling Cabinets with least sales resistance---the value is so apparent.

STEEL CABINET - EXTERIOR LACQUER - INTERIOR PORCELAIN

SEEGER BUILT

This Cabinet by Seeger is sturdily built of finest materials to withstand years of exacting service, satisfactorily.

SEEGER REFRIGERATOR COMPANY

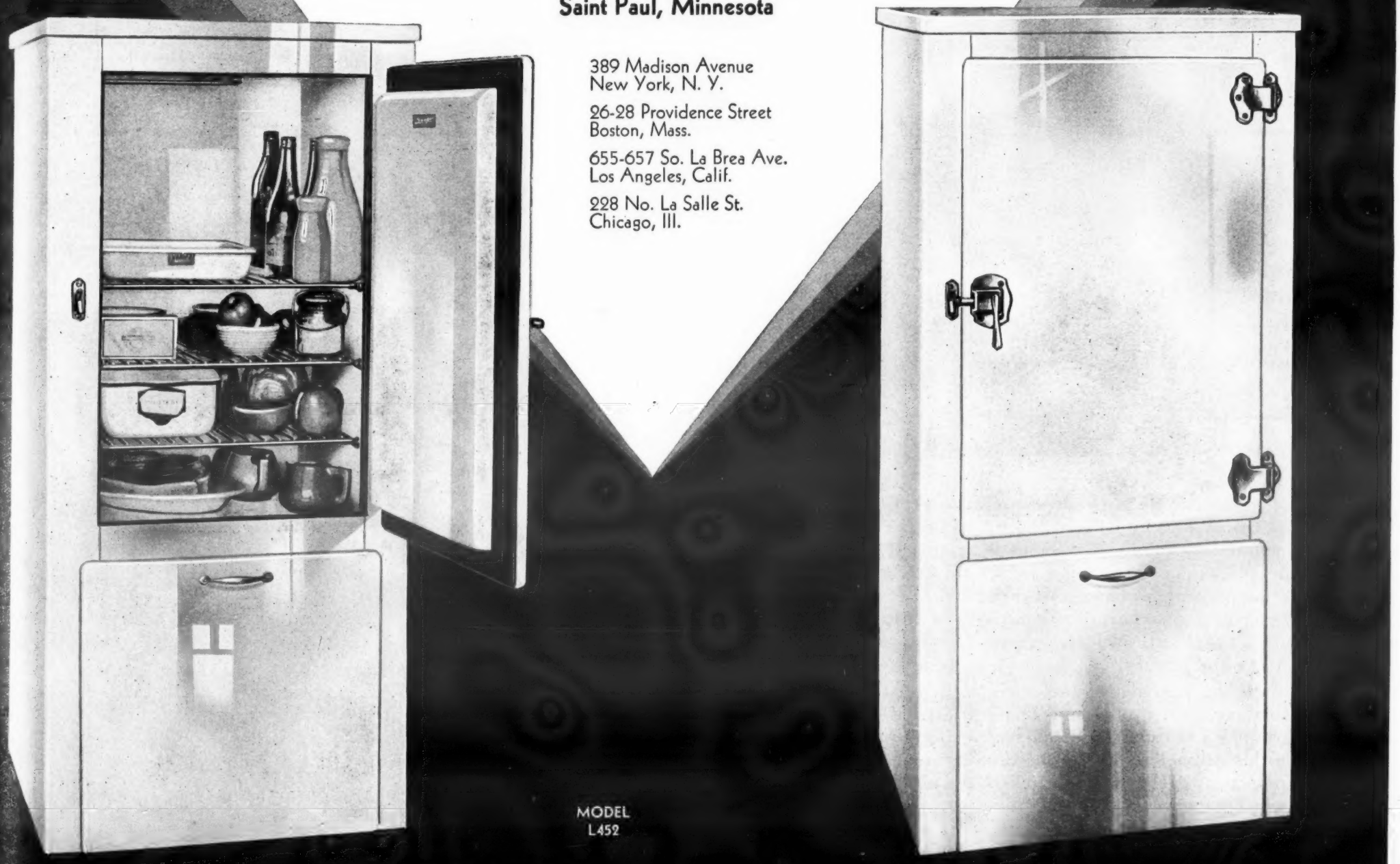
Saint Paul, Minnesota

389 Madison Avenue
New York, N. Y.

26-28 Providence Street
Boston, Mass.

655-657 So. La Brea Ave.
Los Angeles, Calif.

228 No. La Salle St.
Chicago, Ill.



MODEL
L452

DIMENSIONS IN INCHES

	W.		D.		H.
Exterior Over All	24	x	22 7/16	x	52 3/16
Exterior Body	23 3/8	x	21 1/8	x	52 3/16
Interior	18	x	17 1/2	x	28 1/8
Cooling Unit Comp't	12	x	17 1/2	x	11 1/8
Compressor Comp't	23 1/16	x	20 3/4	x	17
Total Capacity	5.47 cu. ft.				
Net Food Capacity	4.12 cu. ft.				
Shelf Area	8.76 sq. ft.				

SPECIFICATIONS

Seeger Adequate Insulation.
Shelves—Wire Bar Type.
Hardware Chromium Plated.
Vegetable Chilltray is NOT Standard Equipment.
Defrosting Chilltray IS Standard Equipment.

SPRINGFIELD COMMERCIAL SALES GOOD

Springfield, Mass. — Springfield Kelvinator Sales, Inc., through the efforts of M. C. Knight, in charge of Worcester county sales, is putting Kelvinators into many meat markets and stores of central Massachusetts. Rousseau's Market in Fitchburg, Boston Market in Clinton, Mead's Market in Hopedale and Quality Lunch in Milford are among the establishments that have just installed Kelvinator equipment.

SUPER
AUTOMATIC OIL HEATOR

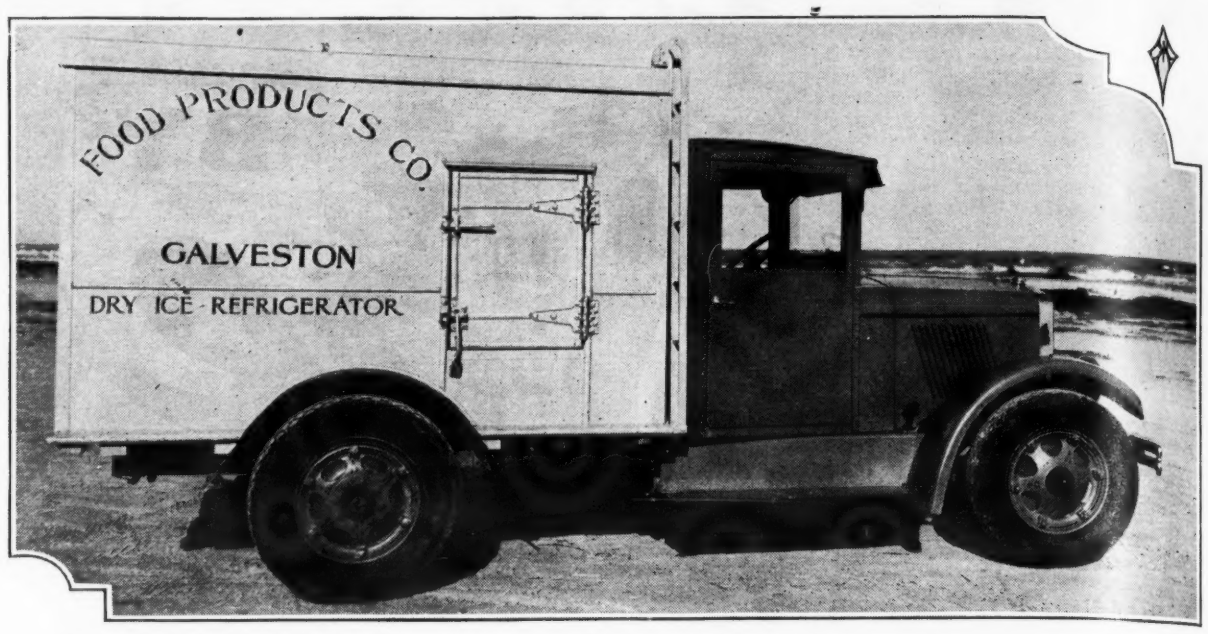
NOW

is the time to start selling the SUPER *Automatic* Oil Heator —while cellars are clean, and furnaces cold.

Write or wire for our Special Summer Plan

THE SUPER OIL HEATOR CO.
275 CONNECTICUT BLVD.
HARTFORD, CONN.

Frozen Food Distribution Service Supplies Active Market in Texas



(*Concluded from Page 1*)

The truck is made by the Relay Motors Corporation, the refrigerator body by Anheuser-Busch, Inc., St. Louis, while the dry ice is furnished by the Dry Cold Corporation of Houston, Texas. It is contemplated that as soon as peaches are available for distribution, they also will be carried.

The distribution service so far established has met with enthusiastic support on the part of the hotels and larger cafes, which acknowledge the service as making it possible to serve a rather extensive banquet without premeditated purchases. The service is given the territory twice each week at definite intervals, and invariably on the same day and time each week, so that the purchaser knows definitely when to expect the products to be available.

At present the territory covered by this service includes Galveston, Houston, Beaumont, Port Arthur, and Orange, Texas, and Sulphur and Lake Charles, La., and intermediate points. This territory serves more than 500,000 persons and is one in which shrimp-prawn are well known and appreciated. They are used as a staple food article. The Food Products Company operates its own freezer, packing plant and production boats, insofar as the seafoods are concerned, purchasing the fruits, frogs and chickens in the market, but dressing and freezing them at the plant.

It developed through the manager of the company, R. C. Trube, that within six months' service probably will be extended to central Texas and Oklahoma, where stocks will be carried and trucks operated from centrally located points for the proper distribution of frozen food products. It seems that the idea of this mode of distribution was made necessary as there were no other transportation agencies which would use extra effort to effect prompt deliveries and provide facilities for the care necessary in making delivery of the various types of food products to the customers in frozen condition.

The Food Products Company is as yet unincorporated, being owned by C. E. Edgar, R. C. Trube and R. C. Trube, Jr., all of Galveston, Texas.

"*This*, Mr. Merchant, is too fine a box to have anything but CORK INSULATION"

Which means that when you sell that box, you're giving your customers their money's worth

ONE WAY to find the best, the most modern refrigerator is to find the refrigerator that is insulated with cork. For the manufacturer who thinks enough of his product to give it the permanent protection of corkboard insulation is the same manufacturer who will equip his box with every other advantage of utility and beauty.

After all, the chief function of the refrigerator *is* permanent food protection. That's why the distributor's salesman will tell you: "Right inside this cabinet wall, corkboard is the permanent guarantee that your customers will be as satisfied in five years as the day they buy. Look at the thickness of this corkboard. Feel how firm and solid it is. Cork is the insulation that resists moisture. It stays dry and efficient."

He'll give you the extra selling points that corkboard offers. Uniform temperature, low current costs. Food kept fresh. These are only a few. And he'll tell you how the cold storage industry has protected millions of dollars of foodstuffs for more than 30 years with corkboard insulation. Other materials have been tested—but corkboard is used.

No wonder the salesman will say: "This, Mr. Merchant, is too fine a box to have anything but cork insulation." There is a sound, logical reason based on past experiences why good refrigerators should be insulated with corkboard. And certainly it is profitable to give your customers their money's worth. Armstrong Cork & Insulation Company, 917 Concord Street, Lancaster, Pennsylvania.

Armstrong's Corkboard Insulation

The standard insulation for refrigeration

PROPAGANDA

Seattle, Wash.—Frozen foods were one of the features of the Electric Refrigerator Exposition held at Frederick & Nelson, here, the first week in June.

Crowds of housewives attended the demonstrations daily in the auditorium from two to four o'clock from June 2 to 6. The demonstrations were under the direction of "Prudence Penny," Seattle's culinary authority. Each day an entirely different program was featured.

Recipes were distributed to the housewives attending the exposition. Four recipes were distributed each day. Standard size recipe cards showed the manner of arranging the recipe.

Besides the frozen desserts and the crisp salads, there were chilled soups, appetizers, meats and fish in the long list of delicacies which can be prepared in the refrigerator.

CASCADIAN HOTEL UNIT TO GET COPELANDS

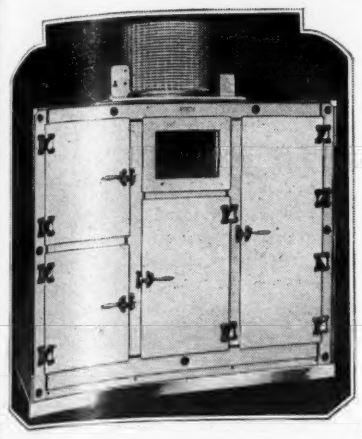
Wenatchee, Wash.—The new unit of the Cascadian Hotel, now being added, will be equipped with Copeland electric refrigeration, according to an announcement by D. A. Lane, sales manager for Harper-Meggee, Inc., of Seattle, distributors in this section.

Refreshing

RAILROAD workers in the Collinwood shops, Cleveland, Ohio, do not have to walk far for a drink of cool water. While modernizing the shops, preparatory to the opening of the new Cleveland Union Terminal, General Electric water coolers were installed to quench the thirst of the men who drive the new electric locomotives to and from the terminal on the Public Square.

Popular Spot With the Railroaders

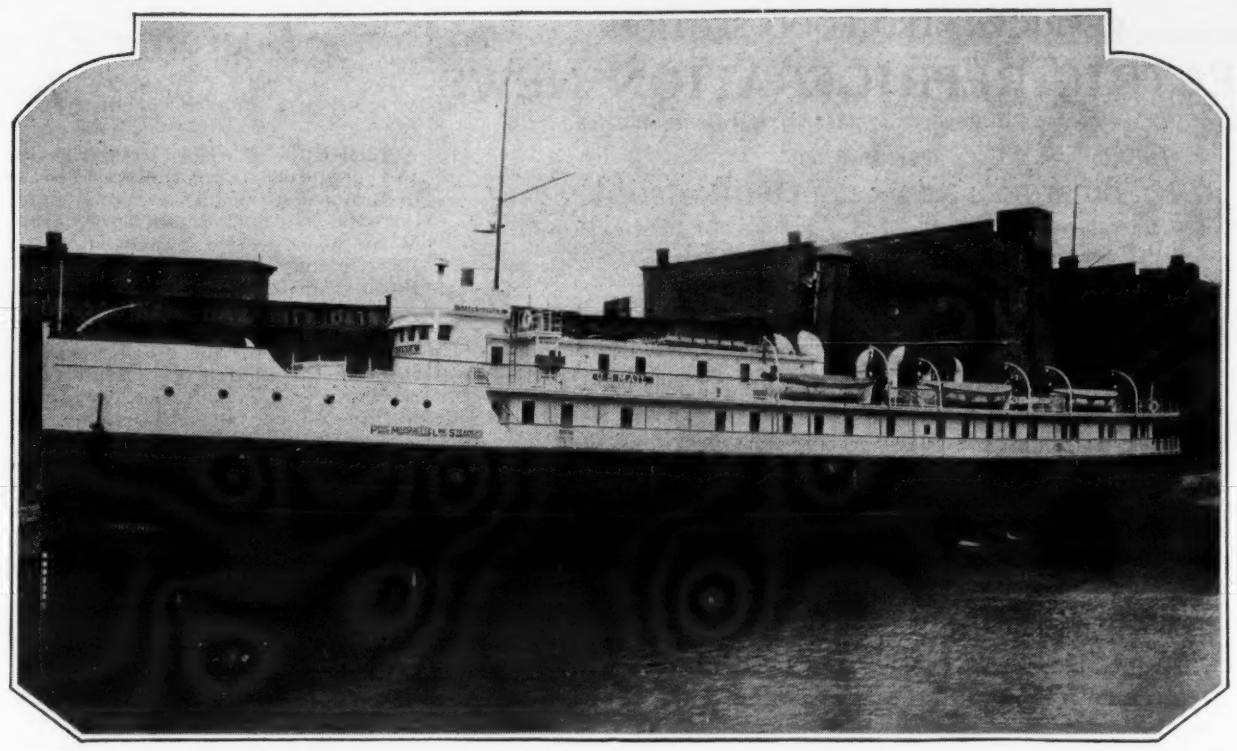
Refrigerators Ride Waves on Big Lake Steamers



PASSENGERS and members of the crews of the Steamers Virginia and Nevada are now enjoying the advantages of electric refrigeration. The boats, which are owned by the Pere Marquette Line, have recently been fitted out with refrigeration by the E. H. Schaefer Corp., General Electric refrigerator distributors in Milwaukee.

The Virginia, pictured here, has a C-451 commercial refrigerator for storing the perishable food supplies used aboard the vessel. Likewise, the Nevada has been equipped with the same type of unit. A little difficulty was experienced in installing the big unit so that it would set intact and ride with the motion of the ship when Lake Michigan takes a notion to kick up a bit in that section. The Schaefer Corp. expects to place a number of marine jobs before the end of the summer.

Supplies sufficient to meet the demands of the passengers and crew are easily stored in the big General Electric model which has 45 cubic feet of storage capacity. The four large doors provide accessible storage and various kinds of perishables are stored in the separate compartments. At Milwaukee, supplies are transported from the commissary and placed in the refrigerator aboard the ship until used. Vegetables in season are carried in large quantities.



DR. GRENFELL REPORTS ON QUICK FREEZING

QUICK freezing of fish is making it possible for salmon and trout caught at Labrador to be shipped to world markets, according to Sir Wilfred Grenfell, famous medical worker, who addressed the National Geographic Society recently at Washington. Labrador, Dr. Grenfell said, is starting to develop its resources, and the abundance of fish will be one of the outstanding factors.

Fish that Labrador could use only as fertilizer may soon become favorites of the American table by virtue of the improvements in the methods of freezing. Quick freezing makes shipments of fish to markets thousands of miles away possible, he pointed out.

CALIFORNIA KEEPS TRACK OF FOODS IN STORAGE

Sacramento, Calif. — The Bureau of Foods and Drugs of the State Department of Public Health has issued its list, compiled on the reports collected by the department the last day of March, showing that of the 15 commodities in the public cold storage plants and refrigerating warehouses in California, vegetables lead with 16,000 tons; followed by fresh fruits, over 10,000 tons; then meats, 2,600 tons; poultry, 2,500 tons; fish, 1,700 tons; eggmeat, 1,400 tons; dried fruits, 1,000 tons; cheese, 550 tons; the others including fruit juice, beverages, eggs, butter, confections, cereals and extracts.

The department reports 65 public cold storage and refrigerating institutions in the state, all licensed and inspected by the State Board of Public Health. None of these 65 establishments include such places as private homes, hotels, restaurants or exclusively retail establishments which do not store articles of food for other persons or firms. The State Cold Storage Law pertains only to warehouses which store articles of food for other firms and individuals.

Following is the detailed table showing the amount of material of various sorts in cold storage in the 65 California warehouses on March 31, 1930:

Beverages	506,035 gals.
Butter	271,633 lbs.
Cereal	13,513 lbs.
Cheese	1,117,443 lbs.
Confections	46,750 lbs.
Eggs	385,850 cases
Eggmeat	2,738,225 lbs.
Extracts (oils)	234 gals.
Fish	3,431,263 lbs.
Fruit	21,626,644 lbs.
Fruit (dried)	2,172,625 lbs.
Fruit juice	738,044 gals.
Meat	5,260,346 lbs.
Poultry	4,962,263 lbs.
Vegetables	33,131,602 lbs.

FRIGIDAIRE WATER COOLERS IN KANSAS CITY

Kansas City, Mo.—H. D. Tenney of the water cooling department, R. E. Parson Electric Company, Frigidaire distributors here, has received an order to install a water system in the new Professional Building at 11fh and Grand Streets, Kansas City.

Outlets will be located on each of the sixteen floors. Thirty-one Frigidaire compressors will be used in this installation.

Finds Increasing Demand for Quick-Frozen Meats

QUICK-FROZEN meats are being sold in City Island, N. Y., by B. Burkhardt, who operates a market at 238 City Island Ave. Swift's hard chilled meats are sold by Mr. Burkhardt, and although his business is increasing slowly, a steady upward trend is noted in sales. A display case designed for quick-frozen meats was installed by C. V. Hill & Co., Inc., Trenton, N. J., to take care of the new products.

Mr. Burkhardt carries about 400 to 500 pounds of quick-frozen meats in stock at all times. Frigidaire equipment keeps the display case at a temperature of 18 degrees F. and at the same time cools a large commercial refrigerator to about 38 degrees F.

This Hill Case Has Ample Storage Room

40 Years Experience

The new model No. 105 shown here is one of an entirely new series of refrigerator display cases by McCray designed to meet the needs of the modern food merchant, and embodying experience gained in 40 years of quality refrigerator manufacture. . . . . .

Consider well the value of such experience. It means, first of all, correct design, both from the engineering and merchandising standpoints. It means staunch construction in every hidden detail. It means thorough insulation with pure corkboard, sealed with hydrolene. In a word, it means efficient, economical service with machine refrigeration of any type. . . Dealers in mechanical refrigeration are invited to write for information regarding the complete McCray line—refrigerators for every commercial purpose—without obligation, of course. . . McCray Refrigerator Sales Corporation, Department 66, Kendallville, Ind. Salesrooms in All Principal Cities. See Telephone Directory.

ALL McCRAY MODELS MAY BE USED WITH MECHANICAL REFRIGERATION OF ANY TYPE

McCRAY Refrigerators

WORLD'S LARGEST MANUFACTURER OF REFRIGERATORS FOR ALL PURPOSES

REFRIGERATED FOOD SECTION

ELECTRIC REFRIGERATION NEWS

The Business Newspaper of the Refrigeration Industry

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JOHN DRITTLER, *Managing Editor* — GEORGE N. CONGDON, *Business Manager*

Eastern Manager: H. A. DeLashmutt, 1950 Graybar Bldg., New York, N. Y. Phone Lexington 9113
Chicago Representative: F. W. Henkel, 306 S. Wabash Ave., Phone Wabash 6668
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Flavor

THE efficiency of refrigeration in the prevention of the growth of bacteria in foods has become a well recognized and accepted fact. As a guarantor of safety, refrigeration has won its place. Everybody knows that refrigerated foods are free from many of the health destroying organisms that multiply so rapidly in foodstuffs kept at ordinary temperatures. That is one of the most compelling reasons why the refrigeration industry is making such rapid strides at a time when other industries are lagging.

There are other reasons, however, for the increasing importance of refrigeration, and one of them is the growing realization that refrigeration is a most efficient method of preserving that evanescent quality known as flavor. Just how intangible a thing flavor is may be discovered by looking up the word in the dictionary. The searcher after definite information will be disappointed.. Flavor is "that quality of anything which affects the taste," according to Webster. The average person could tell you that without resorting to the dictionary. But what produces "that quality of anything which affects the taste," and when you have it, how can you keep it in working order for any considerable period of time?

Questions like those interest the average man of today. The concentration of population in big cities has made the preservation of flavor a matter of more importance than ever before, as fresh products in the older sense of the word are no longer available. Nothing reaches the average consumer the day it is picked—not even the week it is picked, most of the time.

So scientists of today are keenly interested in flavor. They are tracing its origin, characteristics, and life history with all the skill at their command.

And among the many things that they are finding out about flavor, one fact keeps in the front rank. It comes to the fore again and again. Flavor, even when its nature is understood, is one of the hardest things in the world to hold. Fruits especially lose their freshness of flavor so soon after being picked that the problem of preserving it becomes discouraging. Some of the experiments with citrus fruits show that oranges when cut or peeled deteriorate in flavor with breath-taking rapidity. Fish and meats, when held for any considerable time, lose flavor and weight by a dripping process.

It is in the preservation of flavor that refrigeration seems destined to achieve remarkable results. The work of recent years has shown time and again that freezing is one of the most efficient methods of keeping foods in palatable condition. Much of the discussion in regard to the relative merits of quick freezing and slow freezing revolves around this point. The advocates of quick freezing maintain that the limitation of the size of the ice crystals by quick freezing prevents loss of flavor, and there is much evidence to support that view. In any case, the results of the sales of quick-frozen products in Springfield, Massachusetts, and elsewhere in the last few months would indicate that the buying public has found the flavor excellent. There have been comparatively few complaints on that score.

Practically all of the organizations engaged in the freezing of food products today are working with full knowledge of the fact that the freezing must take place when the flavor is at its best. With fruits and vegetables, this means within a few hours after they are picked. With meats, it means at the moment when long experience has shown meats are most palatable. Thus far refrigeration has done remarkably good work in the preservation of flavor. Investigation of its efficiency is still going on and what has been accomplished thus far promises to be only the first step in a long chronicle of success.

This Refrigerated Food Section

is a part of the June 18th

ELECTRIC REFRIGERATION NEWS

The contents of the Refrigerated Food section are of interest not only to the men engaged in the production of frozen food and equipment for handling it, but also to the retailers who deal directly with the consumer. Copies of the Refrigerated Food section go to retailers, to chain store executives and others active in the marketing of food products.

Additional copies of the Refrigerated Food section may be obtained at a cost of $10 per hundred—10 cents per copy.

Boston's Zero Club Makes Many New Friends for Electric Refrigeration

MEMBERS of women's clubs, church organizations and other societies in Boston and vicinity are quite familiar with Zero Park Street, headquarters of the home service department of the Electric Refrigerator Company of New England, distributors for General Electric refrigerators.

"Zero" Club is unique. It combines a model kitchen for the demonstration of the General Electric refrigerator with a women's club—club rooms, card rooms, lecture hall and kitchen. Here one finds a beautiful, restful club in the heart of the shopping district, embodying many novel ideas and home educational features with the comforts and conveniences of the exclusive club. In this case it is the General Electric Refrigerator Club, the members of which are owners of G. E. refrigerators. Every user automatically becomes a member of the club, and she is privileged to drop in at any time.

A wide, ornate stairway leads from the street entrance down to the club rooms. On entering, one senses cordiality in an informal atmosphere of refinement. A dietician is in constant attendance to counsel members and their guests—for users may bring as many friends as they choose. Lectures and practical demonstrations are scheduled daily at 2 o'clock in the afternoon. A feature of this club is the course in home economics that is given free. Advice on the best way to use an electric refrigerator is given, while members are shown how to prepare the many new and wholesome dishes and dainty frozen desserts that may be served by the modern hostess who is the possessor of an electric refrigerator.

Upon the purchase of a refrigerator a membership card is given to each General Electric user. Guest cards are arranged for as many guests as a user cares to bring with her.

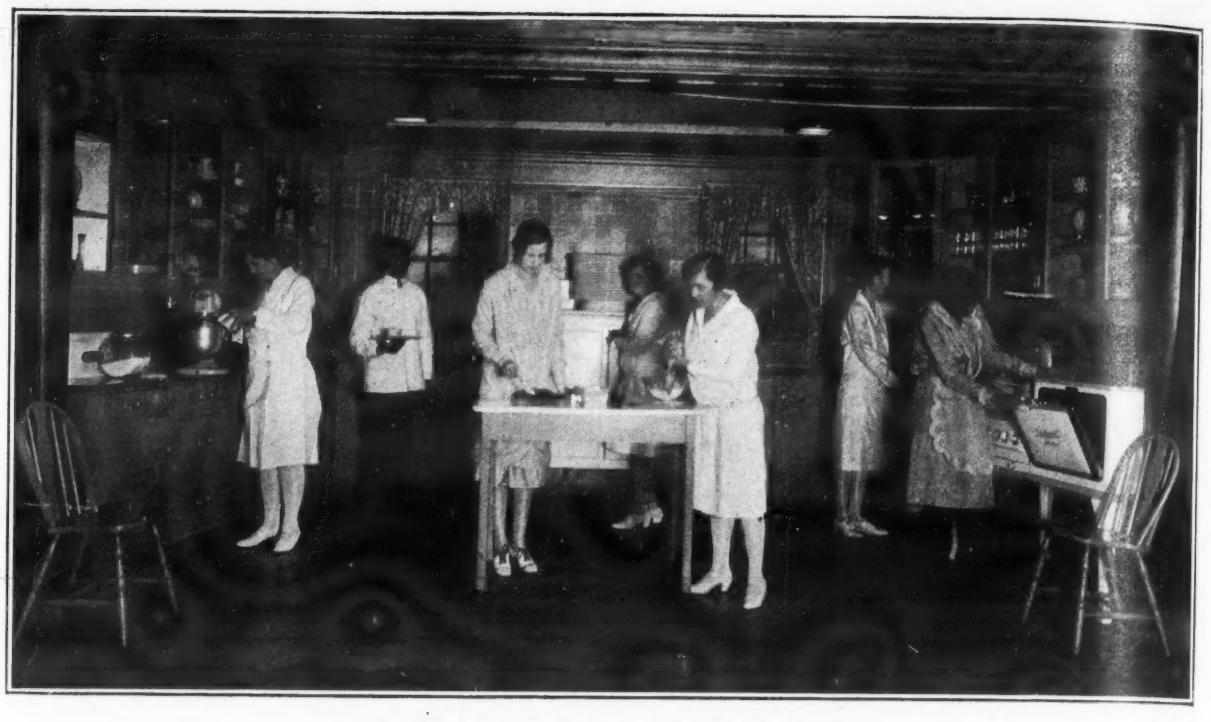
A large staff is maintained at Zero. Mrs. Sarah Crafts Smith specializes in social activities and lecturing; Mrs. R. T. Tutein acts in a secretarial capacity and is always on duty, giving individual instruction and some lecturing, but specializing more in demonstration. Mrs. M. F. Neal spends most of her time in dealer demonstrations. A competent maid and a waiter also are employed. The entire activity is headed by Miss Marion Dow.

Activities are rather diversified. First of all, members of the staff always are available for personal interview and individual demonstration and for menu planning. The telephone is kept busy with calls to users advising them in regard to their cold cookery problems. The staff arranges for and gives special lectures with luncheons for women's clubs, serving a minimum number of thirty and having accommodations to serve seventy women. An eight-lesson course in cold cookery is available. This is given three times weekly and at other times by appointment, the charge for a single lesson being $1.25, or for the full course, $8. However, this course is free to club members of General Electric users and their guests who are quick to show their appreciation.

But the work of the home service department does not stop at Zero. Members of the staff hold demonstrations for dealers three days a week in their own display rooms. They give lectures and demonstrations at county and church fairs and bazaars. They contact other users as well.

Noonday luncheons are served to executives and their dealer guests at Zero, which procedure enables executives to discuss business problems in the General Electric refrigerator atmosphere. Monthly banquets, too, are arranged for the Junior Toppers' Club members and their wives. A weekly luncheon is served to the Underdog Club members. At frequent intervals a five-course banquet is given by department heads. A graduate class of new salesmen is frequently brought to Zero for final instructions before they are launched on their selling careers. Buffet luncheons frequently are prepared and served to sales organizations following meetings held at Zero.

"In our lectures to the various women's groups, we find about seventy-five per cent of those attending are not users of electric refrigeration," says Miss Dow, the director of the work at Zero. "They are guests, as a rule, of club members. In holding demonstrations and lecturing on cold cookery we educate these people in the advantages of electric refrigeration and, of course, explain our product in detail."



The Zero Club is Busy Practically All the Time

OCEANS OF INFORMATION

On Quick Freezing of Fish and Meats in Canada and the United States in New Book by Zarotschenzeff

A VALUABLE contribution to the literature of quick freezing has been made by M. T. Zarotschenzeff. A book by him entitled, "Between Two Oceans," and published by *The Cold Storage and Produce Review* of London, tells of his trip to Canada and the United States in the summer and fall of last year, and discusses in thoroughly non-partisan fashion the various methods of freezing in use on this side of the Atlantic.

The greater portion of the book is devoted to the quick freezing of fish, but there is a chapter on meats in which the work now being done in the United States is described. The activities of the Institute of American Meat Packers are accorded high praise.

Mr. Zarotschenzeff made St. John's, Newfoundland, his first port of call, where he inspected the refrigerator ship Blue Peter, one of the "mother ships" that now accompany the fishing fleets, and make it possible to freeze fish soon after they are caught instead of first bringing them to port. Mr. Zarotschenzeff, throughout his book, dwells on the importance of freezing fish and other products at the earliest possible moment before they have had a chance to lose their flavor.

Science in the U. S. A.

The scientific research upon which the modern developments in quick freezing are founded in the United States and Canada has proved a surprise to European scientists, says Mr. Zarotschenzeff. He expresses himself with charming frankness on this point as follows:

"In Europe they generally hold the view that in America, scientific ideas and thought exist on sufferance only, and that both they and the industrialists move along a strictly utilitarian road, pure science being neglected. I personally, after three trips to America (in 1912, 1926 and 1929) held the opposite view, and had many occasions during the last twenty years of my work in refrigeration to ascertain I was right. During my last trip to America I especially wanted to find out to what extent American industries avail themselves of science and scientific research. I have obtained the greatest satisfaction on being able to ascertain once more that American practical men held in highest esteem, science and research, and followed with keenest interest the progress of the work, in America and Europe alike in physics, chemistry, food industry and refrigeration."

Birdseye-Taylor-Huntsman

Clarence Birdseye and Dr. Harden F. Taylor in the United States, and the group of scientists in charge of Canada's biological stations headed by Dr. A. G. Huntsman, are cited as among the leading scientific men on this continent who have done important work in the development of quick freezing.

A large portion of "Between Two Oceans" is devoted to the scientific work done in Canada and the United States, including a number of valuable tables and charts. This section of the book is extremely useful for the purpose of reference. It contains considerable data on the salmon industry in the Pacific.

The various systems now in use in the United States and Canada are then reviewed by Mr. Zarotschenzeff. He lists them as follows: (a) Immersion in brine (Otteson's process); (b) Taylor's patent process (when suspended individually, fish are subjected to the action of "brine rain" from above); (c) Petersen's process; (d) Cooke's process); (e) Kolbe's process; (f) Birdseye's process.

The Author's Conclusions

Practically all of these methods have been referred to or described in the Refrigerated Foods section of the NEWS. Mr. Zarotschenzeff analyzes them in considerable detail, discusses their advantages and disadvantages, and reaches the following conclusions:

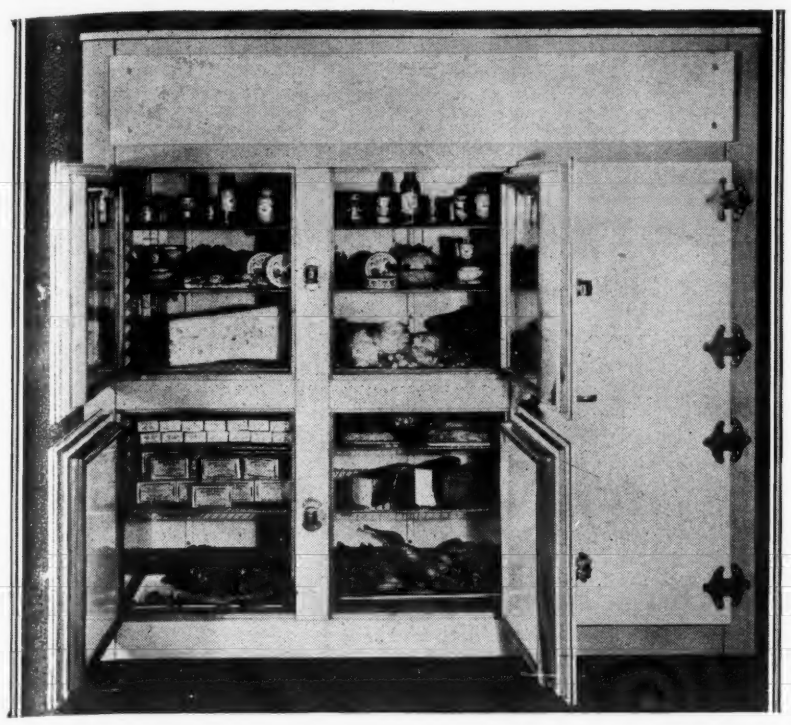
"1. Both practical men and theorists agree that fish must be frozen rapidly on board the fishing vessel. Objections come from one quarter only: the owners of ice making plants supplying fishing fleets with crushed ice. They imagine that practice of fish freezing on board would spell ruin for the ice making industry. No great amount of imagination is necessary to visualize the future, and prove that ice makers' fears are unfounded. There will be room and a job for everyone in a reorganized and rationalized fish industry. With a certain amount of judicious adjustment, ice-making plants can be turned into specially equipped fish cold stores, or fish packing houses.

"From every standpoint, public health, hygiene, national economy, science, technique and civilization, the method of rapid freezing of fish products on board should be hailed as a true and adequate solution of a centuries old problem.

"(2) Rapid chilling and freezing makes possible a prolonged cold storage (3, 6 and 8 months), providing the products are glazed prior to storing, and are kept at the requisite temperature, etc.

(Concluded on Page 12, Column 5)

Loading the Larder



If variety is the spice of life, as the proverb says, this big Frigidaire could qualify as a spice box. Before it was posed for its picture the Frigidaire crew sent out a foraging expedition to collect an assortment of foodstuffs. The foragers made good

FEMININE

View of Quick Frozen Foods

THE feminine attitude toward quick-frozen foods is well expressed in the June issue of the *Modern Priscilla*, one of the leading national women's magazines. Writing of an inspection trip to the Birdseye plant at Gloucester, Della T. Lutes, Director of the Priscilla Proving Plant, has this to say:

"The development is still in an experimental stage, so far as fruits and vegetables are concerned. At the Proving Plant we have had not only filets of fish and all manner of sea food, but roasts of meat, steaks and chops. We have also had peas, spinach, cherries, raspberries and loganberries—all frozen stiff when they came to us—kept as long as we pleased at 20 degrees below freezing and, when cooked, as fresh as when picked.

"This whole plan of the preservation of food is so new, so unique, so revolutionary as well as evolutionary, that it is reaching you more as an interesting piece of news than as suggestions for your own buying—as yet. The wheels of industry move so rapidly in these days, however, that before you know it, almost, you will be going into one of your local stores—and not necessarily a meat market, for any store can carry these products—and buying your Sunday dinner in packages so neat and attractive that they will hobnob with dainties from the silk counter without conflict."

ICELECT MAKES SHIPMENT TO HONOLULU

Omaha, Neb.—The IcElect Corp. made a shipment of cylinder coils to Honolulu on May 27. This is the second consignment to be sent to that port. The necessary pipe was also included to make the hook-ups needed. This is the cylinder made of the size to carry a ten-gallon ice cream can, and will be used for cream storage in Honolulu.

A deal is practically closed with a large New York ice cream manufacturer, who will take several hundreds of the cylinders to be used in his retail stores.

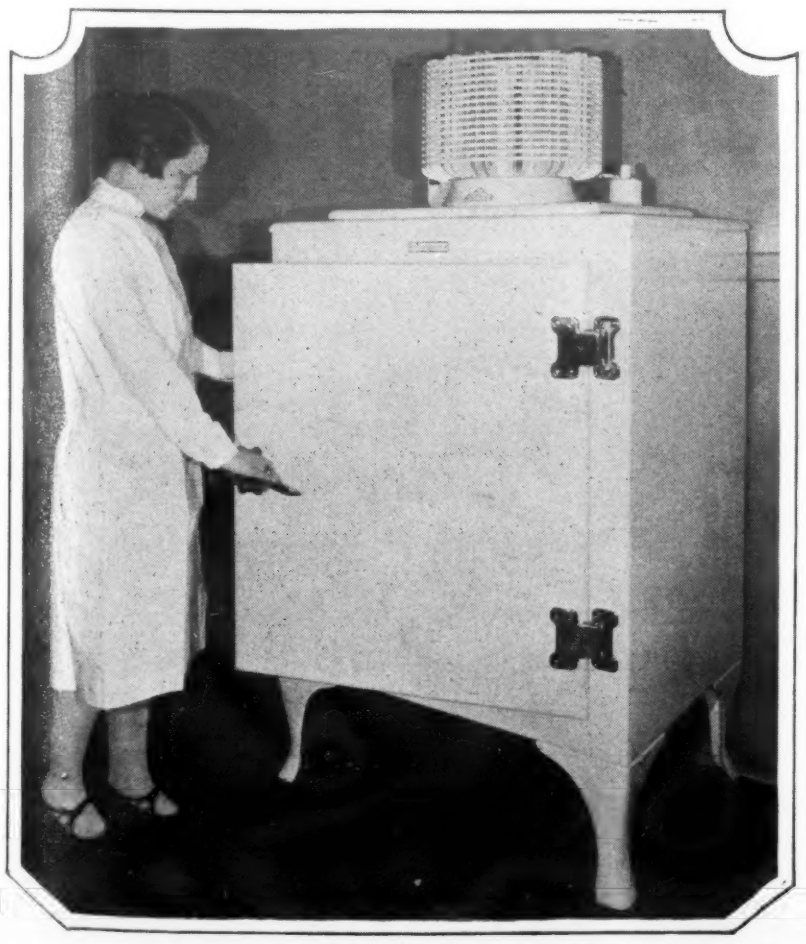
YAKIMA COMPANY NOW SELLING COPELANDS

Yakima, Wash.—Schott Bros., located at 17 North Second Street, have been named as agents for Copeland electric refrigeration in the Yakima Valley.

Ready for the Radio

HERE is a young woman who is known to thousands of radio listeners. She is Mary Hale Martin, director of the home economics department of Libby, McNeil & Libby, and she is shown here with the General Electric refrigerator which is used in the model kitchen of the Chicago establishment.

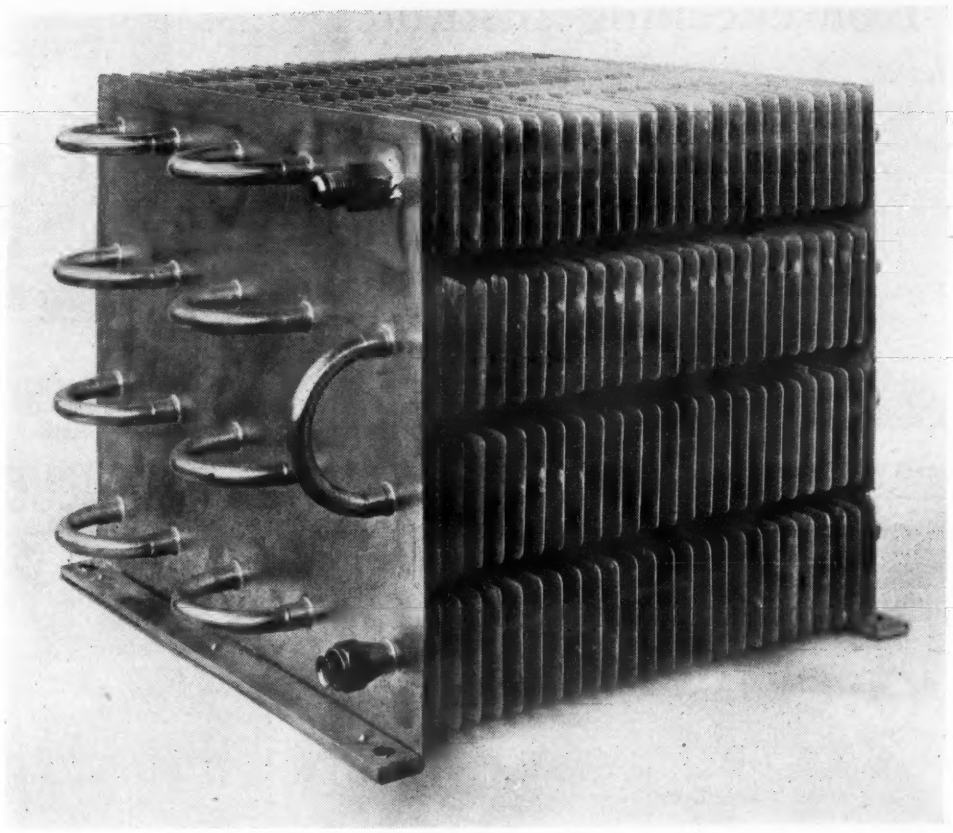
Miss Martin broadcasts every Wednesday morning over the N. B. C. network. She broadcasts direct from the kitchen as she prepares the dishes she describes to listeners. The refrigerator does no broadcasting.



Mary Hale Martin and Her G. E. Refrigerator

BUSH

EVAPORATORS



Any Size Evaporators Made Up To Customers' Specifications

SEAMLESS COPPER TUBES

« INDIVIDUAL FINS »

The same efficient methods and processes employed in the production of Bush Condensers—now so extensively used by the Electric Refrigeration industry—are utilized in the production of Bush Evaporators.

The Bush process of soldering, for example, produces absolute metal contact of fins with tubes thus resulting in the highest efficiency of the completed unit.

Write us about your needs

THE BUSH MFG. CO.
HARTFORD, CONN.

W. H. MARK HANNA
6-247 GENERAL MOTORS BLDG., DETROIT, MICH.

FRUIT GROWERS SEEK TAX EXEMPTION

Yakima, Wash.—The State Legislature has been asked to come to the aid of the fruit growers of the Yakima Valley by exempting fruits in storage from taxation for a period of one year from the time they are picked. The Washington State Advisory Tax Commission has been requested to make a recommendation to that effect as part of its report to the Legislature.

B. A. Perham is chairman of the committee of the Yakima Valley Traffic and Credit Association, which has made the request. He points out that soft fruit shipped during summer and fall is exempt, while fruit in storage on March 1 is taxed. As a result large quantities of apples and pears are thrown on the market in February by growers anxious to escape the tax, the market becomes glutted, and prices fall.

JOINING THE PROCESSION

THE fact that the interest in refrigerated food is constantly increasing is demonstrated by publication of a large number of articles in the business press. The latest recruit to the cause is *Ice and Refrigeration*, of Chicago, which in its June issue presents its first "Frozen Foods" section, printed on tinted stock.

This is a National Message to the American Housewife

Good Housekeeping Institute

Recommends Proper arrangement of foods in your refrigerator, and KVP advises the use of Proper Papers for food wrapping and protection. There is a big difference—to get the most good out of your refrigerator are you using both KVP Refrigerator Papers?
There's Household Parchment for cooking and for wrapping all greasy, moist and wet foods—it's boil-proof—it wears—use it again and again. KVP Heavy Waxed Paper "Cutter Box" seals tight (one sheet will do)—keeps the moisture in or keeps the moisture out as desired. Remember, all foods should not be wrapped in Waxed Paper—for 100% results use the famous pair of KVP food wrapping and cooking papers.

Try your Grocer, Stationer, Hardware, Department Store and Naborhood Merchant first; if they cannot serve you, KVP will pay the parcel post.

Send $1.00 for the two big 50c rolls (West of Missouri and South Coast States, 60c per roll, both for $1.20 postpaid).

FREE When ordering, mention this ad for a Miracle Paper Dish Rag and interesting samples for you and your friends.

KVP STANDS FOR "THE WORLD'S MODEL PAPER MILL"
KALAMAZOO VEGETABLE PARCHMENT CO.
KALAMAZOO MICHIGAN U.S.A.
MANUFACTURING WORLD-WIDE FAMOUS FOOD PROTECTION PAPERS

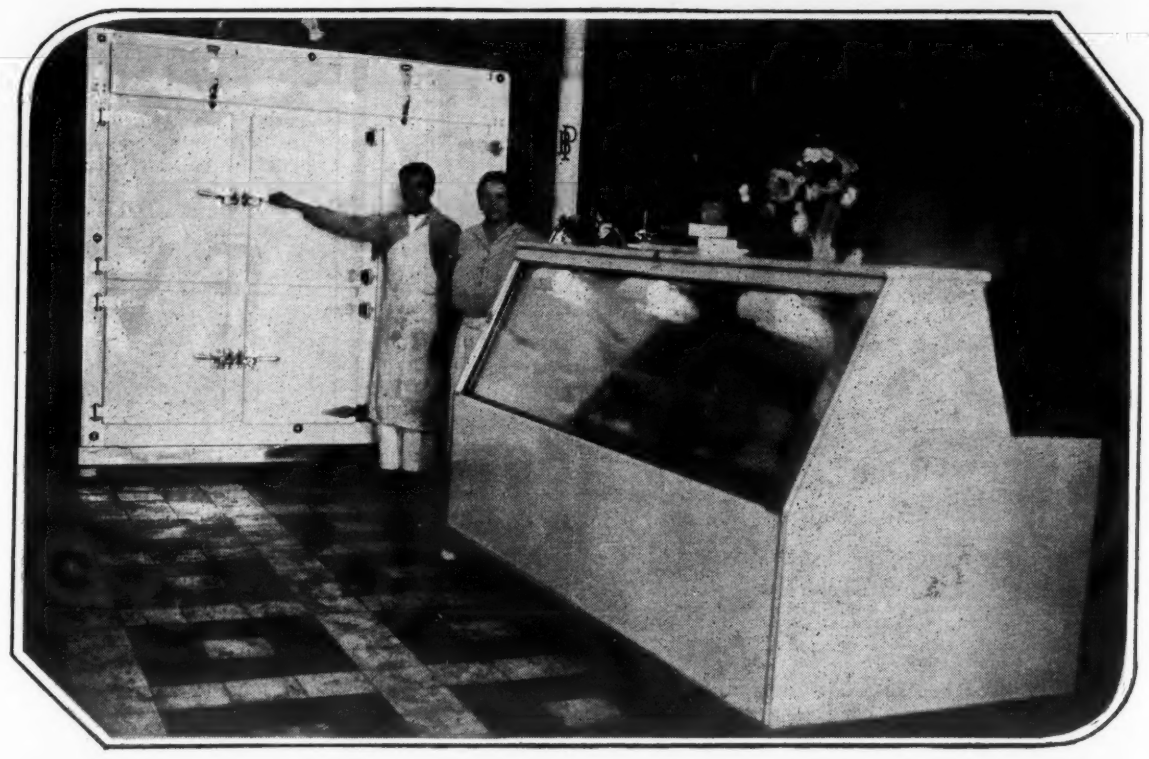
IF you are in any way interested in Electric or Gas Refrigeration ...read the above over twice because it will mean much to you. .. this is our National message to the American Housewife in cooperation with your refrigerator sales campaigns. Write for samples and advertising ideas that sell your refrigerators to new customers and keep old customers interested.

LIG-O-NIER PORCELAIN-CLAD DISPLAY COUNTERS NOW AVAILABLE IN BLUE OR GREEN OR WHITE

This is the age of color. In every business color is being used to attract public favor, to give new zest to selling. The new Ligonier Porcelain-Clad Colored Display Counter is now available in delicate pastel shades of blue or green, or in pure white. In either of these attractive colors it will brighten up food stores and make meats and other perishable foods on display more tempting and inviting. The new Ligonier Porcelain-Clad will last a business lifetime, and give 100% unobstructed display. It is engineered for mechanical refrigeration. Like all Ligonier Refrigerator Equipment it is built of the finest materials by Ligonier master craftsmen. Ligonier Refrigerators, Coolers, and Grocery Boxes all of Ligonier fine quality are built in a wide variety of models and sizes to meet every food store need. Write for catalog and full information.

LIG-O-NIER REFRIGERATOR COMPANY
LIGONIER, IND.
A Division of ALLIED STORE ASU UTILITIES CO.
AGENCIES IN ALL PRINCIPAL CITIES

Seeger in the Orient



PROPER preservation of foods is of prime importance the world around. In sections far distant from our borders, American made equipment is doing its share in storing and keeping foods. In the Parisienne Meat Market at Haiphong, Indo-China, a Seeger PL75-62 cabinet and a 8-foot display case, Frigidaire equipped, are doing their duty. Despite the most trying humid temperature the Seeger equipment is giving complete satisfaction.

DIFFICULTIES

Beset Path of South African Refrigerator Salesman

GROWTH of South Africa as a market for electric refrigeration equipment makes this region a productive territory for the sale of this type of product, according to R. J. Thompson, Frigidaire engineer, who has returned to Dayton from a 13 months' business sojourn there.

Free importation of electric refrigeration equipment, coupled with the fact that weather conditions make refrigeration necessary at all times during the year, is resulting in the rapid acceptance of mechanical refrigeration in South Africa, he said.

A survey conducted by Mr. Thompson in eight of the largest cities in South Africa, to determine the number of days per year when the temperatures do not go above or below the safety range of from 32 to 50 degrees resulted in the following figures: Capetown, none; Durban, none; East London, none; Port Elizabeth, none; Johannesburg, 3; Kimberly, 1; Bloemfontein, 3, and Pretoria, 2.

Refrigeration selling has its disadvantages, even under these conditions, Mr. Thompson pointed out. Widely scattered population over huge expanse of territory makes close coverage difficult. The firm of Kittleson & Rees, Frigidaire distributors at Johannesburg, has a territory the size of the United States, with a total white population about equal to that of Detroit.

The era of selling the "need" still exists in South Africa. People are not educated to the advantages of refrigeration after years of doing without. Many well-to-do residents consider a cold whisky and soda distasteful. One Frigidaire owner stated that he never uses ice cubes in his beverages or puts his soda bottles in the Frigidaire.

Other difficulties present themselves. Because so many of the white residents of South Africa are British colonial officials who regularly are given every third year as a vacation period, they are unwilling to purchase equipment which would have to be abandoned at the end of two years. Housewives have little to do with the operation of their kitchens, sending native servants to do the marketing and handle the food. As the result they are not closely acquainted with their own food spoilage problems, and this point is difficult to "sell" under such conditions.

On the other hand, warm weather helps the refrigeration salesmen. Among commercial prospects there is a preponderance of shrewd business folk who recognize a good business proposition when it is presented to them in the form of definite money savings. The electric refrigeration story is well accepted among this class, Mr. Thompson says.

No tariff barrier has been erected against the importation of Frigidaire products, and equipment is sold there with only the added cost represented by freight charges. The government of South Africa, holding that refrigeration equipment is essential to the health of the people, has made this ruling.

Twenty-eight railway stations, owned and operated by the government railway system, have installed Frigidaire equipment in their refreshment stands. This equipment is used to preserve foods and cool beverages.

At Mombassa in Kenya Colony, near the equator and subject to intense seasonal heat, the refrigerator salesman runs up against another novel situation.

Practically all of the better class of people in this city all spend the greater part of the hot weather season at Nairobi, altitudinous inland city where it is always cool. They are not at home when hot weather comes—why should they have refrigeration?

Despite these varying conditions, however, Frigidaire's South African business is growing rapidly and all American-made products are received exceptionally well in this progressive country, Mr. Thompson said.

TWO BIG G. E. MODELS NOW KEEP FROZEN PUDDINGS COOL

San Francisco, Calif.—Epplers' Bakery, 886 Geary Street, San Francisco, with two branch shops, also in San Francisco, has installed two large General Electric refrigerators to take care of their popular frozen puddings and other frozen delicacies. The L. H. Bennett Company, with its San Francisco headquarters at 118 New Montgomery Street, San Francisco, and with branches in Oakland, Sacramento, Stockton, San Jose, Palo Alto and Burlingame, is the Northern California distributor of the General Electric refrigerator.

BIRMINGHAM McCRAY BRANCH TO MOVE

Birmingham, Ala.—Within the next sixty days the Birmingham branch of the McCray Refrigerator Sales Corporation will move into a new location. The new location will be in Smithfield Park. The company is now located at 121 South Twentieth Street.

Every Counter Refrigerated

THE new Fourteenth Street Market, Washington, D. C., one of the largest and most up-to-date in the country, was recently completed and opened to the public. Every counter is equipped with Kelvinator electric refrigeration equipment.

Sixty dealers sell green groceries and staple merchandise in this food emporium. Barber & Ross, distributors at Washington, D. C., sold and installed the Kelvinator refrigeration equipment.

The New Fourteenth Street Market In Washington

ENTREES

Chilled in Refrigerator Tempt Appetites

EVEN the most enthusiastic home maker tires occasionally of the continuous round of meal preparation. There are meals to be prepared in seemingly endless parade—breakfast, luncheon, dinner; three meals a day, seven days a week, fifty-two weeks a year—in order that the family may be fed the nourishing food so necessary for their physical well-being.

"What shall I serve for dinner tonight?" is the cry of countless women in all sections of the country every day. "Where can I find something new, something different, something unusual?" This quest for variety, and for palate-tempting dishes with which to intrigue the jaded appetites of the family is engaging the attention of every housewife.

Perhaps it is more difficult to secure a variety of dishes for the main course of a meal than for any other one course. The traditional roasts, steaks and chops served for the meat course of the dinner, while enjoyed almost universally, should not be overworked. Why not try at this time to introduce into your menus some of the delightful electric refrigerator entrees which are becoming so popular all over the country?

The word "entree" as it has come to be commonly understood in American meal planning refers to some meat, or meat substitute, served in combination with sauces, or other highly seasoned foods. For the most formal dinners, the entree may be served as a light meat course preceding the roast of fowl. For informal dinners or luncheon service, a more generous portion of an entree is often used as the main dish in the meal.

Nothing could be more appropriate for meals than entrees chilled or frozen in your electric refrigerator. These dishes are most economical, offering as they do splendid opportunities for the use of left over meats and other delicious food tid-bits. Many unusual and toothsome combinations are achieved accidentally by the thrifty housewife in her efforts to utilize leftovers, which would otherwise be wasted.

In addition to the economy feature, electric refrigerator entrees are delicious, out of the ordinary, and seasonable. Dishes which are nourishing, and at the same time dainty and attractive enough to tempt capricious appetites, may be prepared quickly and easily with the aid of your electric refrigerator.

For many of these entrees rice or spaghetti may be used as a "meat extender," with meats or fowl or fish of various sorts. Mixtures of this sort may be seasoned with meat sauces, and bound together with mayonnaise or a cream sauce. They should be placed in your electric refrigerator and chilled for an hour, or an hour and a half, when they may be sliced and served on lettuce with mayonnaise. Nut meats, finely chopped, and such fruits as pineapple and oranges may be used successfully in these mixtures.

Cheese dishes make delightful entrees, and may either be frozen in your electric refrigerator or jellied in souffles, or in combination with model seafoods.

BRYCE

Says Distribution Is Vital

THE distribution of quick-frozen products is a big problem and must be met by all companies contemplating to enter this field. Fresh products that are quick frozen must be transported in refrigerated cars to distant markets, and this service must be complemented with refrigerated truck facilities before the product arrives at the wholesaler's or dealer's place of business. The producer of quick-frozen foods must see that these problems are overcome and that the products arrive at their destination in the frozen state.

Some of the problems which confront the packer are covered by F. W. Bryce, president of the Atlantic Coast Fisheries Company, in an interview appearing in the current issue of *Food Industries*. To insure safe delivery, his company has built up a fleet of 60 Silica Gel refrigeration cars which keep the products at a temperature of 15 degrees F. while in transit. In this way Nordic quick-frozen fillets can be shipped safely to every section of this country.

Another spoke in the wheel of distribution is proper wholesale facilities. So far, Mr. Bryce points out, wholesalers have made but few strides in the direction of quick-freezing, because they fail to foresee the possibilities of the new food products.

"Moving goods from the point of distribution to the retail store also is a real problem. There are now some trucks on the market that are equipped with mechanical refrigeration so as to deliver the product to the retailer in prime frozen condition. However, few of our distributors use them, as their cost is still high. Furthermore, the true advantage of refrigerated motor trucks can be attained only if retail stores have the necessary equipment to store the quick-frozen foods at the required low temperatures.

"Therefore, if we are to capitalize to the fullest extent the important advantage of being able, through quick-freezing, to deliver a better product to the consumer, it is necessary to study the location and equipment of each distributor and then limit his activities to an area in which he can serve the retailer by available truck service while the frozen product is still nearly, at least, in its prime frozen state.

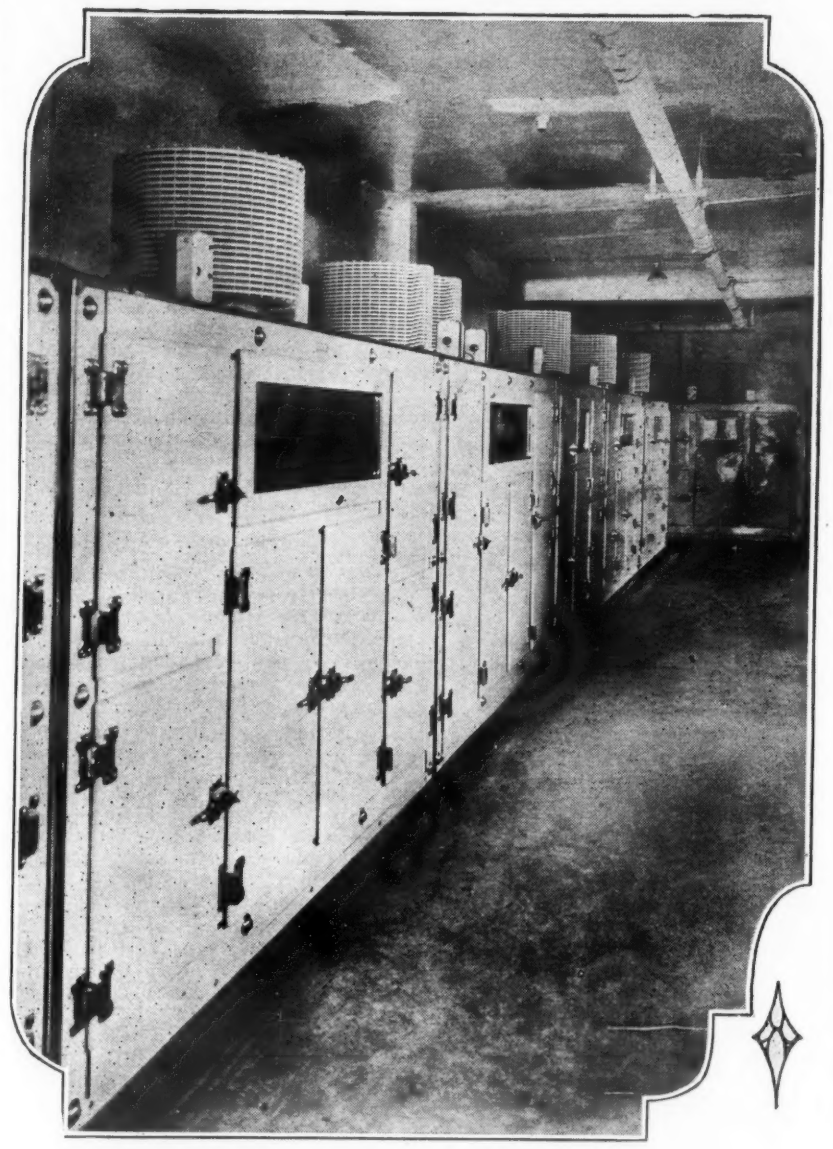
"Thus we arrive at that which constitutes the most formidable hurdle—the question of the retailer. The very nature of this new type of processed food has demanded that if the advantages and economies of the manufacturing processes are to carry through to the ultimate consumer, existing habits of the food industry can be allowed to prevail only so long as they do not interfere with the orderly processes of economical distribution.

"It does not matter whether it be the butcher, the baker, or the candlestick-maker. Be it a Woolworth store or a florist's shop, if the location of a retail store, or if its appearance, arrangement, degree of cleanliness, or the personality of the proprietor or manager offers no obstacles, our distributors have found that our frozen products can be retailed successfully, and at a profit.

"Obviously, we believe that grocery, meat and vegetable stores offer the ideal outlets for retail selling of these products. Independent retailers and managers of chains must have a direct and continuous interest in eliminating the losses that result from the perishability of certain foods. The quick-freezing process does this to an admirable extent. We therefore hope that there will be a continually growing interest on the part of food retailers, so that the consuming public may find these food products where it really expects to buy them: namely, in food stores.

"There is, however, a second section to this retail hurdle. Quick-frozen products are rather new to the public. The degree and rapidity of their acceptance is dependent greatly upon suitable displays, and particularly upon having the product remain frozen as long as possible. That requires suitable store refrigerators."

Health Row



The Big Models Dominate This Scene

ONE of the largest hospital installations has just been completed at Laval Hospital, Ste. Foy, Quebec, where eighteen General Electric refrigerators now are doing service.

Eight of the large cabinets, placed end to end, required so much space that all of the cabinets could not be squeezed into one photograph. A portion of one of the models can be seen at the left.

The equipment consists of one C602 special, 112 cubic feet, porcelain interior, with two icing units; one special milk cabinet, 140 cu. ft.; three C600 standard, 60 cu. ft.; one C450 standard, 45 cu. ft.; one C451 standard, 45 cu. ft.; one ice maker and ten standard 5½ cu. ft. cabinets. The latter are installed in diet kitchens and have been in use for some time. The larger models have just been put in.

Laval hospital has grown rapidly and this fact has been responsible for the large refrigeration requirements. The hospital was opened in June of 1918, with a capacity of 125 beds, and the first building quickly proved to be too small. Another unit was opened in 1924, with equal capacity. The two buildings were quickly filled, and the Board of Directors decided to erect a sanatorium and a clinic for modern medical service, the former providing for 100 more private patients and the clinic and two flats for another 100 patients. The new buildings are just about completed and will be ready for occupancy about the first of July.

Are *YOU* working *ALL* these profit fields?

New, rich opportunities right at your door. Increased business with your present set-up.

ESCO Electric Milk Coolers — For cooling and storing cans of milk. For cooling and storing bottled milk.

Ice-Makers — For hotels, restaurants, clubs, country estates, etc.

Special Cooling Cabinets — Special adaptations to water-cooling for bakeries, soft drink cooling, etc.

Completely engineered, strong, attractive.

Nationally advertised in leading dairy and farm publications. Advertising literature, cuts, and sales material furnished.

Equip your organization to get this business. Let our engineers help you on special adaptations. The use of our copyrighted Data Tables enables you to determine the correct size cabinet and compressor for any milk cooling job.

ESCO Electric Milk Cooling Cabinet

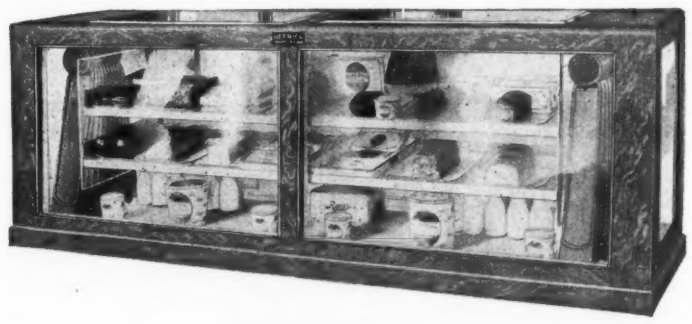
ESCO CABINET COMPANY

World's Largest Manufacturers of Milk Cooling Cabinets

West Chester , , , Pennsylvania

It pays you—

because it pays the user



HERRICK

FULL VISION CASE

DESIGNED *for* DISPLAY

Coils at ends, occupy minimum space, at the same time providing maximum refrigeration and circulation. Roomy, sanitary, triple-tinned shelves; glistening, white enamel interior. Shows to best advantage all the foods placed in it, making greatest appeal at the time when the customer is in the buying mood.

BUILT *for* ECONOMY

Heavy insulation. Air-tight doors. Three thicknesses of glass, each set solidly in air-tight plastic. These and other features of construction explain its surprisingly low cost of operation. Four stock sizes—six, eight, ten and twelve feet long.

TURN your potential grocery and market customers into actual buyers by showing how the HERRICK Full Vision Display Case pays for itself.

This specially designed HERRICK case multiplies profits, by increasing sales, at no added sales cost. It has plenty of room for the average stock of foods. It keeps them just as good as they look—and that is good enough to tempt many a dollar from waiting shoppers.

Correctly designed and carefully constructed of selected materials, the HERRICK Full Vision Case greatly reduces spoilage of perishables. Its operating expense will scarcely be noticed on the electric bill.

The name HERRICK on any case or refrigerator designed for mechanical units is enough to recommend it to grocers, hotel and restaurant owners, among whom for two generations it has stood for all that is sturdy and reliable in refrigerator construction.

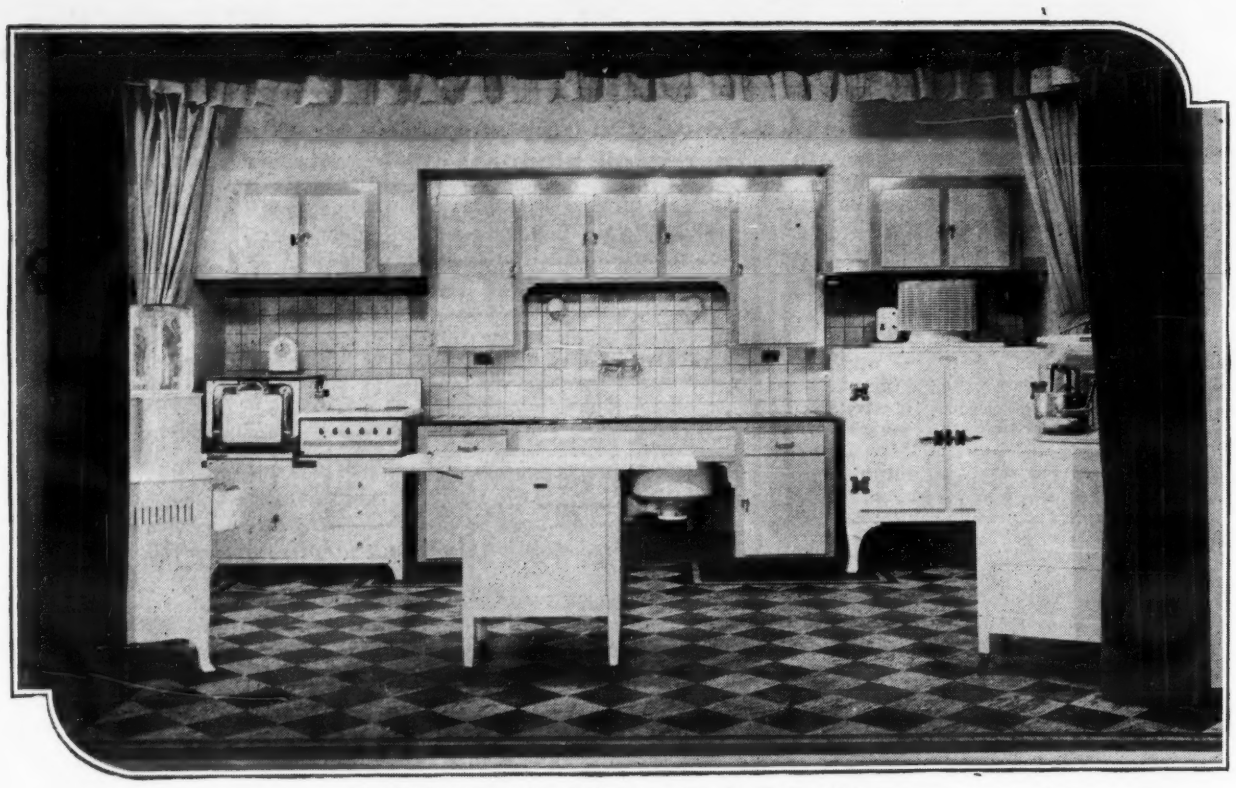
Ask for catalog of commercial models.

HERRICK REFRIGERATOR CO.

1009 Water Street, Waterloo, Iowa

Sunshine and Fresh Air Speed the Recovery of the Convalescent at the Laval Hospital

New Ideas in Foods Originate Here



Food Problems Are Solved at the G. E. Institute.

Cleveland, Ohio—Refrigeration Institute, established by the electric refrigeration department of the General Electric Company at Cleveland, is by way of being an educational institution, an experimental station for new ideas and a fountain head of information—all rolled into one.

To this institute come General Electric refrigerator representatives from all sections of the country, and, for that matter, from many foreign climes. Distributors and groups of key men gather there to hear and discuss new ideas. Advertising and sales promotion managers meet there at intervals to launch new campaigns. Home service women of the distributor organization convene to discuss cold cookery, diet and health subjects, new recipes and new uses of the refrigerator. Product men come to go over new improvements. Utility merchandising managers, commercial men and apartment house specialists confer there on new methods of campaigning.

Scarcely a week passes but that one or more conferences of one kind or another are on the Institute schedule, and during the course of a year the attendance at institute meetings will run into impressive figures.

Engineers and scientists from the General Electric laboratories at Schenectady, N. Y., home economics authorities from government bureaus at Washington, business leaders and others outside the industry, bringing the outsider's point of view, have participated in institute programs.

Space is conserved and used to the best advantage in the institute layout. For instance, at one end of the institute is a stage. Pull back the stage curtains and there is displayed a model kitchen, fitted out electrically from range to refrigerator, food mixer to dishwasher.

At the other end of the institute is a model store window, equipped with novel lighting effects; this being the laboratory for the window trim suggestions which are sent each month to dealers by the sales promotion department.

Equipped for radio, photophone, ordinary movies or sales talkies, the institute can be turned quickly into a theater. The projection room is modern in every respect.

Walls of the institute proper are lined with folding displays, where current advertising and sales promotion literature is exhibited.

"We have tried to make the institute serve a general all-around purpose," says Paul H. Dow, director. "When not being used for division conferences, it affords an excellent opportunity to carry on experiments in food preservation and in the working out of the many new recipes in connection with electric refrigeration."

This is a national institute. Since its establishment, most distributors of General Electric refrigerators have set up local institutes fashioned along similar lines. In the local institutes, however, home service activities hold the center of the spotlight, with directors of home service conducting lectures, teas and other affairs of this sort in the local institutes.

Paul H. Dow

ICE CREAM COMPANY REPEATS ORDERS

Miami, Fla.—That it pays to build up a friendly clientele among users of Frigidaires has just been demonstrated by C. E. Kirby, of the Domestic Light Company. When the Chapman Ice Cream Company opened its first store in Miami last November, Mr. Kirby sold them Frigidaire ice cream cabinets. Since that time four other stores have been opened by this company, and in each instance Mr. Kirby was awarded the order for Frigidaires. The fifth store is being opened to the public now, and it is equipped with two twelve-hole Frigidaire ice cream cabinets. The Chapman Ice Cream Company has an expansion program under way at the present time.

BRITISH ASSOCIATION ELECTS NEW LEADER

London, England—Sir W. B. Hardy, F.R.S., has been elected president of the British Association of Refrigeration. The new executive has made for himself a notable reputation since he was appointed controller of the Government research organization dealing with food products, and has shown a keen interest in refrigeration problems despite the other calls on his time and attention.

Under its new leadership the British Association of Refrigeration is planning an active year. Sir W. B. Hardy can be counted on to keep things moving in any organization which he heads.

COLD COOKERY

Simplifies the Preparation of Meals in the Home

COLD cookery demonstrations are being conducted by various distributors and dealers of General Electric refrigerators, in co-operation with educational workers of the Charles B. Knox Gelatine Company, of Johnstown, N. Y.

These demonstrations are attracting good sized crowds everywhere, reports Miss Eleanora Sense, who is in charge of the activities of sixteen young women engaged in the company's food education bureau. Miss Sense, who has been with the Knox Company for the last three years, is a graduate of the University of Wisconsin, and, before her present connection, was dietician of the Central School of Nursing at Milwaukee.

"The electric refrigerator is a boon to the housewife," Miss Sense says. "It is a good investment for any home. It saves on the food bills. It saves on the ice bill. It saves on labor. It is an aid in marketing and a help in meal planning.

"In this respect I always advise women who own General Electric refrigerators to go to market on marketing day. I tell them to ask their grocer just when he gets most of his green stuffs in and then to make it a point to buy their fruits and vegetables and other like perishables on that day. They can keep them just as well, or better, than he can, if they have the refrigerator.

"Our workers also advise women to purchase the largest refrigerator they can afford, as from ninety to ninety-five per cent of the food purchased for the average family can be and should be placed in the refrigerator.

"With warm weather here, we urge women to cook in the cool of the morning. We tell them to cook in larger quantities and show them how they can save time for themselves by so doing. They can use the same dessert base, for instance, in two different ways, thus having one thing for lunch and another for dinner—all made in the morning.

"When women have finished with their marketing, we tell them to wash the lettuce, shell the peas, scrape the carrots, and similarly prepare all other green stuffs before putting them into the refrigerator. Thus everything placed in the refrigerator is ready to be used when time come for cooking. Thus, too, the food is properly cleansed.

Value of Left-Over Foods

"Our girls also stress the value of using left-overs, and we give them practical demonstrations in making desserts from left-over fruits, or salads from left-over salad materials. We also show our women guests the proper way of placing food in the refrigerator.

"In the talks on the General Electric refrigerator, our young women discuss cold cookery from every angle. We show that cooking by heat is tedious and requires many last-minute preparations, while cold cookery allows vegetables, fruits and milk to be served in their natural state without the destruction of vitamins by heat or having loss of mineral content. Cold cookery is especially adaptable for spring, summer and fall months, and the congealed or frozen salads and desserts are acceptable as well in the winter months because of their attractiveness, ease of preparation and food qualities.

"Demonstrations of congealed and frozen salads and desserts are given. Tuna or salmon fish salads are made, or a Jewell salad or Perfection salad, with rolls or sandwiches made in advance and kept fresh in the General Electric, or a dessert such as Philadelphia vanilla ice cream or a fruit Bavarian cream. Orange cream sherbert or chocolate mousse often are made in advance and served during the demonstration, or a fruit mousse may be substituted.

"To get the most out of the refrigerator, we point out to women guests various uses. First, as a cold storage plant, which allows for purchases in larger quantity; second, in keeping food in excellent condition, including left-over fruits, vegetables and meats which can be made into attractive and delectable desserts and salads, with the use of Knox Gelatine; third, in allowing advance preparation.

"If time allows, the subject of safeguarding one's health with proper refrigerated foods is taken up and special subjects are covered, such as infants' and children's diets and the use of weight reducing diets."

Miss Sense, with another of her assistants, Miss Dorothy Proud, has been busy recently with home economics work in various cities in Ohio. Miss Sense gave demonstrations for the Milnor Refrigerating Company's dealers in Portsmouth and Hamilton, Ohio, as well as in Newark. Miss Proud has carried on similar activities in Oxford, Columbus, Mt. Vernon, Newark and other places. She is to assist in the opening of a new Ohio Power Company store in Zanesville in July. She has been especially active with the Bard-Barger Company, General Electric distributors with headquarters at Columbus.

EQUIPMENT

THE manufacturers listed below are making display and storage cases, which, they have announced, are suitable for the handling of quick-frozen foods. Descriptions of the various cases have been printed in previous issues of the Refrigerated Food section.

American Foundry Equipment Co.
Blazek & Co.
Commercial Refrigerator Mfg. Co.
Downing Mfg. Co.
H. Ehrlich & Sons Mfg. Co.
Electro-Kold Corp.
Elkins Refrigerator & Fixture Co.
Federal Refrigerator Co.
Ford Refrigerator Co.
Frigidaire Corp.
General Electric Co.
Gibson Refrigerator Co.
C. V. Hill & Co.
Hussmann Refrigerator Co.
Koch Butchers Supply Co.
Ligonier Refrigerator Co.
Marsden Store Fixture House.
McCray Refrigerator Co.
Northey Mfg. Co.
Nu Way Fixture Co.
Ottenheimer Bros.
C. L. Percival Co.
Servel, Inc.
Smoot-Holman Co.
Warren Co.

In addition to the above mentioned, a number of manufacturers of refrigerating machines are co-operating with producers of display cases and refrigerators. Among these companies are:

American Foundry Equipment Co.
Copeland Products, Inc.
Frigidaire Corporation.
Kelvinator Corporation.
Servel Sales, Inc.

Retailers, chain store executives or others, who are making plans to merchandise quick-frozen products, may obtain, without obligation, further information in regard to the equipment made by these manufacturers by writing to:

Refrigerated Food Section
Electric Refrigeration News
550 Maccabees Bldg., Detroit, Mich.

Safeguarding Appetites

(Concluded from Page 1, Column 3)

These cases are equipped with special tailor made coils. A block of ice is frozen where formerly chipped ice was used.

Two specially constructed coils for the cooling of drinking water.

In the basement kitchen, one R516 Copeland condenser unit with model 83G Copeland Larkin coil is furnishing refrigeration for a Northey refrigerator used for kitchen service storage purposes.

The counter equipment was of the ice type and converted to mechanical refrigeration. The bottle compartments are kept at a temperature of 38 degrees, the ice cream compartments at zero, and the salad cases set to hold a block of ice. This necessitates the using of six 2-temperature valves.

The picture on page 1 shows the interior of the restaurant, emphasizing the counter equipment. The one above shows a close-up view of half of the counter equipment, showing milk and storage compartment equipped with Larkin coil and one ice cream compartment, and one section of a salad case which is equipped for freezing a block of ice.

REFRIGERATION RUBBER WARE
Specializing in the development and manufacture of hard and soft rubber parts for electric refrigeration.
THE AETNA RUBBER CO.
ASHTABULA, OHIO

DETROIT'S GREAT HOMELIKE HOTEL
IN THE VERY HEART OF DETROIT
THE TULLER is the headquarters for tourists and travelers. Delightfully furnished, homelike atmosphere. Abundance of air and sunshine, large, spacious lobbies and lounging rooms. Famous for our restaurants.
800
ROOMS WITH BATH
$2.50 and up
HOTEL TULLER
Facing Grand Circus Park
HAROLD A. SAGE, Manager
LATZ INC.

RECO ELECTRIC MILK COOLING
"The Boiler Plate Cabinet"
DOMESTIC UTILITIES
Division of the Refrigeration Corp. of Maryland
ARLINGTON, BALTIMORE, MARYLAND

Enjoy the Luxury of a
PARLOR BEDROOM & BATH
at about the cost of an ordinary Hotel Room

WASHINGTON - D. C.
CAVALIER HOTEL
3500 14TH Street
NEW AMSTERDAM HOTEL
2701 14TH Street
PHILADELPHIA
CHATHAM HOTEL
Walnut Street at 20TH
PARLOR - BEDROOM & BATH - $5.00 TO $7.00
Single Room with Bath $3.00 to $4.00
Double Room with Bath $4.00 to $6.00
Less by Week or Month

The Imitation Food Products Co.
(Branch of The Artistic Production Co.)
107 Lawrence Street
Brooklyn, N. Y.
Ask for our catalog of January 1, 1930. Direct sales only. "Indispensable with refrigerator display."

SUMMER

Menus Require Many Dishes Made in the Refrigerator

By Miss Olive Kaiser
Westinghouse Refrigerator
Home Economist

MAKE the most of these early summer days. Invite your friends in, and let your new Westinghouse refrigerator act as a maid. Perhaps there are many housewives who dread summer company. It may mean that most of the day is spent cooking and preparing for them with the usual result of the hostess feeling fatigued when her guests arrive.

The following may be called "club plate" menus. The main course is served directly from the hostess' kitchen on individual plates.

This makes it easy for the hostess, as it not only simplifies serving, is a "dish-saver" (we are always interested in meals that save dish washing), but she may serve her hot foods hot and her cold foods directly from her refrigerator, cold, refreshing and appetizing.

Club Plate Menu I

Ham salad in tomato cups
Buttered asparagus tips
Hot Biscuits
Pineapple macaroon
Coffee

Ham Salad

6 medium size tomatoes
1 cup diced boiled ham (½ lb.)
⅔ cup diced celery
3 diced sweet pickles
2 diced hard cooked eggs

Peel and hollow out six firm, medium sized tomatoes, and place in the Westinghouse refrigerator to chill.

Mix diced ham, celery, pickle, hard cooked eggs with mayonnaise. Thoroughly chill in the refrigerator. Fill chilled tomatoes with the mixture before serving. Serve on lettuce leaf, garnished with parsley. Serves six.

Pineapple Macaroon

1½ cups strained crushed pineapple
½ lb. marshmallows
½ cup macaroon crumbs
1½ tablespoon lemon juice
1 cup milk
1 cup whipped cream

Cut marshmallows into fourths. (To prevent marshmallows sticking to the scissors, dip scissors in water.) Scald 1 cup milk, thoroughly dissolve marshmallows in the hot milk. Chill in the refrigerator, add strained, crushed pineapple, macaroon crumbs, 1½ tablespoons lemon juice and 1 cup whipped cream and mix well. Freeze in deep tray. Freezes in four to five hours. Turn temperature Selector to "1" until frozen, then to "2" or "3" to keep until served. Serves six to eight.

Club Plate Menu II

Assorted cold meats
Latticed potatoes
Cabbage and Egg salad
Refrigerator rolls Iced tea
Strawberry meringues

Cabbage and Egg Salad

2½ cups chopped cabbage
1 cup weak vinegar
2 tablespoons sugar
3 hard cooked eggs
Parsley

Pour over the 2½ cups chopped cabbage the cup of weak vinegar that has had the 2 tablespoons of sugar dissolved in it. Place in the Westinghouse refrigerator and let it remain soaking for 2 hours. Thoroughly drain and combine the 3 chopped hard cooked eggs and mayonnaise with the cabbage. Season to taste and place on lettuce leaf, garnish with paprika and finely chopped parsley. Serves six.

Strawberry Meringues

1 qt. fresh strawberries
1 tablespoon gelatine
2 tablespoons lemon juice
1 cup sugar
¼ cup cold water
2 cups whipped cream
12-14 Meringues

Mash enough strawberries to make 1 cup. Soak gelatine in cold water for 5 minutes. Heat fruit and juice to boiling, add gelatine, sugar and lemon juice—chill in the refrigerator. When the mixture begins to stiffen, fold in stiffly beaten cream.

Freeze by turning the Temperature Selector to "1" until frozen, then to "2" or "3" to keep until served.

Crush remaining strawberries. To serve, fill meringues with the strawberry mousse, place tablespoon unsweetened crushed strawberries on top of mousse and another meringue on top of this. Serves six to eight.

Club Plate Menu III

Chicken croquettes with white sauce
Strawberry cube salad
French rolls
Celery curls Coffee
Chilled fruit cake

Strawberry Cube Salad

1 package lemon flavored gelatine
½ cupful boiling water
1½ cupful ginger ale
⅔ cupful chopped dates
¼ cupful chopped nuts
18 cleaned stemmed strawberries

Dissolve 1 package of lemon flavored gelatine in ½ cupful boiling water. Add 1½ cupful ginger ale, stir to thoroughly blend. Place in the Westinghouse refrigerator until the mixture begins to thicken. Use empty shallow ice tray, with the aluminum partitions that is used in making ice cubes, placed in it. Pour a half tablespoon of mixture into each section, and place a strawberry with stem side down in each section. Chill in the refrigerator and when the mixture has become congealed the strawberry set in place, pour in the remaining mixture that has had the chopped nuts and dates stirred into it. Put into the refrigerator to finish congealing after molding, place 3 squares with the strawberry side up, on a bed of lettuce. Garnish with mayonnaise that has been mixed with whipped cream.

Chilled Fruit Cake

1½ cup banana pulp
1 cup confectioners sugar
3 tablespoons lemon juice
1 tablespoon gelatine
2 tablespoons cold water
¼ cup boiling water
1½ dozen lady fingers
1 cup whipped cream

Put the bananas through a potato dicer or sieve. Add sugar and lemon juice. Use a Dover egg beater to mix the sugar, lemon juice and banana pulp. Soak the gelatine in the cold water, dissolve in boiling water, and add to the banana mixture.

Chill in the refrigerator until partially thickened.

Line a deep round mold with wax paper. Split the lady fingers into halves. Fill mold alternately with a layer of lady fingers and banana mixture.

Let stand in the refrigerator until congealed. Just before serving cover with 1 cup of whipped cream. Arrange sliced bananas, that have been dipped in lemon juice, to prevent them from turning dark, on the top. Serves six to eight.

Copeland Makes Large Showing at New Orleans Food Preservation Show

AT the recent Food Preservation Show in New Orleans, Edward N. Eberling & Co., distributors for Copeland, maintained a display which helped to emphasize the need for mechanical refrigeration the year 'round. The show was held in the New Orleans Public Service building and upwards of 35,000 persons viewed the refrigerators on display.

Special programs throughout the week were devoted to the various phases of food preservation and demonstrations were put on by prominent home economists. These demonstrations were very popular with the housewives. The home economists gave several talks over the radio on refrigeration in the home.

INSULATION

Has Prominent Role in the Refrigerator Field

THE preservation of foods of all kinds by refrigeration is becoming such a commonplace affair, is taken so much for granted, that the public is beginning to lose sight of the careful planning and construction that must be done to produce efficient refrigerating equipment. And one of the first things lost sight of is, naturally enough, those constituent parts of the equipment that are carefully buried out of sight.

That happens to be the almost universal fate of the insulation. It is tucked away in a shell of steel, wood or other material, and is expected to stay exactly where it is put. The expert, of course, knows enough to find out about the insulation at the very outset of his investigation, for he is well aware of the fact that the lack of proper insulation will put the best efforts of the finest refrigerating machinery to naught. The layman, on the other hand, is not especially interested in the insulation, and thereby often misses one of the most important points of all when purchasing a refrigerator.

Among the insulating materials now extensively used in refrigerating equipment is Celotex, a board made of cane fibre. It can be found today in almost every kind of refrigeration equipment.

Farmers and dairymen line their storage and milk houses with sheets of thin cane fiber board. The trucks that carry the perishable produce from the farm to the railroad have Celotex on the sides, the roof, and the floor. Large numbers of refrigerator cars are built with Celotex insulation. In 1928, Celotex refrigerator car insulation was used in 91 per cent of the entire number of new and rebuilt cars, of which there was 10,581.

In the mechanical refrigeration Celotex is again in service, lining the cabinet and, sometimes, the motor housing of the electric refrigerating unit. For example, an average of 15 carloads of Celotex refrigerator insulation per week are sent to various manufacturers of mechanical refrigerators and ice cream cabinets.

Some chief manufacturers using Celotex are: Kelvinator, General Electric, Copeland, the Alaska Refrigerator Company, Westinghouse Electric & Manufacturing Company, Iceberg Manufacturing Company, the Russ Manufacturing Company, Nehi Bottling Company, The Whistle Company, Coca Cola Company, Seeger Refrigerator Company, Norge Corporation, Crystal Refrigerator Company, Gibson Refrigerator Company and many others.

The thermal conductivity of Celotex refrigerator insulation board is 0.30 B.t.u. per hr. per sq. ft., per inch thickness, per deg. F. difference in temperature. Although Celotex refrigerator insulation board weighs but 11½ to 12 pounds per cubic foot, it is strong, and so can be used to give structural strength to the cabinets of mechanical refrigerators, thus reducing the weight and size of wood members and, as a consequence, reducing the weight of the entire refrigerator.

Servel-Filtrine Equipped

A COMBINATION Servel-Filtrine water cooling system has been installed in the White Oak Mill of the Proximity Mfg. Co. at Greensboro, N. C., by the Odell Hardware Company of that city.

The installation serves employees in a weave room containing 3,011 machines on one floor, the largest single floor weave room in the world. Seven No. 1 Deluxe Filtrine coolers, operated individually by Servel 22-AW water cooled compressors, have been installed. Each cooler has a 14-gallon galvanized steel pressure tank containing a continuous extra heavy galvanized steel expansion coil.

The coolers are placed throughout the weave room at points convenient to operators of the machines so as to afford properly cooled drinking water supply without the necessity of operators traveling far from their zone.

—and NOW—

"SERVEL"!

ADOPTS AS STANDARD FACTORY EQUIPMENT

The New Dry Expansion

100% VERTICAL SURFACE

LARKIN COILS

FOR ELECTRICAL REFRIGERATION

PATENT APPLIED FOR

That Banish Defrosting and Dehydration Losses Forever

SERVEL Electric Refrigeration

Is the Latest Leading Manufacturer of Electrical Refrigeration Equipment to Make Larkin Dry Expansion Coils Standard Factory Equipment.

This List Tells a Convincing Story

COPELAND — Detroit, Mich.
ABSOPURE — Detroit, Mich.
ICE-O-MATIC — Bloomington, Ill.
UNIVERSAL — Detroit, Mich.
KULAIR — Phila., Pa.
TRUPAR — Dayton, Ohio
ZEROZONE — Chicago
ROYAL — Hornell, N. Y.
JACK FROST — Toronto, Can.
POTTER CORP. — Portland, Ore.
BRUNSWICK-KROESCHELL CO. — Brunswick, N J.
SERVEL — Evansville, Ind.

There is a type and size of Larkin Dry Expansion Coils for every type of commercial refrigeration. Write any manufacturer listed for complete information.

Larkin-Warren Refrigerating Corporation

Originators and Manufacturers

ATLANTA - GEORGIA